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No. 34



1952

## REVISED INDEX OF INDUSTRIAL PRODUCTION

### 1935-1951

(1935-1939 = 100)

Prepared by the Business Statistics Section  
Research and Development Division

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## FOREWORD

The new index constitutes a basic revision of the "Index of Industrial Production". It incorporates a great deal of additional information from annual Census of Industry records and betterments in the method of treating the basic data. As the period of revision included the war years of marked industrial change, the difficulty of measurement was enhanced. Since the war, the increased collection of relevant information on a monthly basis added greatly to the improvement of the current index.

The emphasis in the new index was placed on obtaining a volume index of **net output** for as many industries as possible and the relevant statistics of production, materials and employment were carefully studied for this purpose. Census data were utilized to compute annual levels for all industries for the period 1935-1947, and these annual bench-marks constituted a framework for the construction of monthly indexes for this period. These indexes were extended forward to the current period by means of monthly information on production, shipments, materials or man-hours, and on later census data for some industries. It is planned to revise the annual levels for the years after 1947 in the light of Census of Industry material as it becomes available.

The period 1935-1939 was adopted as the weight base and the reference base of the revised indexes. In line with the Bureau policy of converting existing indexes onto the post-war base of 1949, opportunity will be taken, at the time of the next revision, to change the weighting system on the base of 1949 and to express the index in terms of 1949=100.

It should be noted that while the new monthly index and its components are adjusted for calendar variations and the length of the working week, no attempt was made to remove the influence of seasonal fluctuations. The difficulty of adjusting for the new post-war seasonal patterns together with the relatively short period on which to base ratios of seasonality contributed to the decision of postponing the introduction of new seasonal adjustments until more research was possible.

The annual and monthly indexes shown in this report supersede, from 1935 to the present, the volume of manufacturing indexes previously published in the "Canada Year Book" and the indexes of industrial production currently appearing in the "Canadian Statistical Review". The indexes will appear henceforth in these publications on the revised basis only.

This report is divided into two parts, followed by a series of appendices comprising tables of indexes and descriptive material. Part I reviews the principles and methods used in the construction of the volume series and discusses some of the major problems encountered and how they were treated. Part II presents an analysis of the movements of the major groups and important sub-groups over the period covered by the index. Differences between the volume of gross and net output for certain industries are also discussed in this section.

The present volume was prepared by the Business Statistics Section of the Research and Development Division of the Bureau. Throughout the study helpful advice was given by various divisions of the Bureau, and the co-operation and assistance, especially of the Industry and Merchandising Division, and the Labour and Prices Division, are gratefully acknowledged. The charts were prepared in the Drafting Section of the Bureau.

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**PART I**  
**Principles and Methods**





## PART I

### PRINCIPLES AND METHODS

In recent years, due to violent changes in prices, unadjusted value series, used in isolation, have become increasingly inadequate as indicators of economic trends. Of necessity, interest has shifted to measures of volume. The field of industrial production, because of its dominating position in the national economy, has attracted increasing attention. This, in turn, has resulted in the need for more accurate measurement of physical output.

During the past few years, the Business Statistics Section of the Bureau's Research and Development Division has been engaged in the reconstruction of the Index of Industrial Production. The project consisted mainly of establishing annual gross and net levels of production for each industry from census of industry data and of improving the reliability of the current monthly series. The discussion on methods used in constructing the indexes is preceded by a summary of the history of the computation and a description of its scope and classification. The relationship of the index to national accounting is then discussed. In view of its interest and importance, a special section deals with problems relating to gross and net output in index-number construction. This is followed by more detailed discussion of formulae and weights used and a summary of general problems and limitations of the index. An analysis is also made of the movement of the main groups of the index during the period covered.

The construction of this index was made possible by the availability of a great deal of basic data. Annual statistics valuable for this project have been collected by the Bureau without interruption from the end of the first World War to the present and the scope of the monthly information has been greatly expanded. Applying the methods developed through the experience of the last quarter century, it has been possible to compute an index with a fair measure of accuracy from 1935 to the present.

Prior to the end of the first World War, the movement of industrial production was regarded as following the output of a few factors such as pig iron. The introduction of the index number placed the information on a much wider base. It is safer to base one's impression of the current trend upon a comprehensive index embracing a wide range of economic factors than upon any limited group of components that necessarily fluctuate according to particular influences.

An index of this kind offers considerable advantage in analyzing social and economic problems. The greatest call for the index is for the interpretation of

current economic conditions. It is particularly relevant in the study of business fluctuations. While the index is based on the sectors of the economy that are particularly sensitive to short term influences, it also reflects a large part of the variations in the total of all economic activity. The output of mines and factories plays a dominant part in economic fluctuations and is closely associated with transport and trade which are mainly concerned with the distribution of commodities. The barometric nature of the industrial sector enhances the value of the index as an indicator of short-term movements but its usefulness in the interpretation of long-term economic developments should not be overlooked.

#### History of the Computation

The first official index of industrial production for Canada was published in January, 1926 in the "Monthly Review of Business Statistics", covering the period following the first World War. The index included construction, mining and manufactures, the latter having been computed from sixteen factors. Seasonal indexes were prepared by the month-to-month link relative median method and adjustment made for factors with a seasonal pattern. The computation was effected by taking an average of weighted indexes. The base was the six-year period from 1919-1924 and the weights were derived from the value added in different sectors as given in the annual census.

The first revision of the index, published in September, 1932, embodied a number of important changes. The base period was altered to the single year 1926 and the aggregative formula was used with the prices of the base year being taken as the weights. The number of components in the manufactures section was increased to 29, resulting in a considerably greater range upon which to build the computation. Supplements were published in 1932 and 1934, giving the original data and relatives of the components of the index from 1919 to the date of publication.

The next revision, placing the index on the pre-war base of 1935-1939, was published in the Review of February, 1941. The weighting system was constructed on the principle of "value added". Minor changes were made in the underlying series. The production of crude petroleum was added to the mining section and the textile group in manufacturing was entirely revised, silk and rayon being added to the components. The recomputation was carried back to January, 1919, and the results for four composite indexes printed in the February, 1944, Review.

A large number of changes were made in the revision announced in the Review for May, 1947. Owing to the difficulty of measuring the physical volume of construction, the group was dropped. The Standard Classification of Industries was adopted as the framework superseding the component-material system. The number of industries and products represented in the index was much increased. Collection of current information was greatly expanded during the war and post-war periods. Statistics of deliveries, materials consumed and man-hours were used in cases where the volume of output was lacking. Failing efficient data on a monthly basis, the yearly census was used to establish annual levels. For this purpose, a study was made of the principal products of various industries as given in annual census of industry reports from 1935 to 1945. This is the index which has been currently published in the "Canadian Statistical Review".

### Scope and Classification

In its study of index numbers of industrial production, the Statistics Office of the United Nations recommended that member nations include in their indexes the following divisions of the International Standard Classification of all Economic Activities: mining and quarrying, manufacturing, construction and the major groups electricity and gas. Because of the inadequacy, at present, of current statistics to measure accurately the volume of output in the construction industry, it was decided not to incorporate this industry in the index as indicated above. The desirability, however, of including construction in a measure of industrial output is fully appreciated, and efforts will be directed towards obtaining a satisfactory series for this important sector. Although the distribution of natural and manufactured gas is a non-industrial activity, it cannot be separated, in practice, from production. The scope of the Canadian index is thus limited to mining and quarrying, manufacturing and electricity and gas.

The Canadian annual Census of Industry, from which final benchmark indexes are computed, covers practically all establishments, but excludes work in the home. In the matter of repairs, the census of manufactures generally excludes work performed in connection with a service trade such as boot and shoe and automobile repairs. However, the census covers repairs carried on essentially under industrial conditions, such as ship and locomotive repairs. Consequently only industrial-type repairs are included in the index.

The framework of the revised index is based on the new Standard Classification of Industries prepared by an inter-departmental working committee. The preceding system used by the Bureau of Statistics was of a three-fold nature based on (1) chief component material; (2) purpose and (3) origin. The first principle was used most extensively, the criteria of purpose and origin having been used for the presentation of supplementary series which played a secondary role in Bureau publications.

The main innovation introduced in the Standard Classification was the compromise between the different principles. In recent years, Canada's industrial system has undergone considerable development, from a country primarily concerned with the early stages in the processing of primary materials to one that is turning out more and more goods for final consumption. Consequently, in establishing the new classification, the concept of "purpose" has been combined with that of "chief component material" in the framework of the classification of manufacturing industries. The purpose phase was regarded as most appropriate for the wide range of consumer goods such as clothing and foods and beverages.

The industries grouped under the component material phase of the classification from 1935 to 1947 were re-arranged to conform with the standard model. As most of the industries were not greatly affected by the change in classification they were transferred intact to the proper position in the new system. The standard classification, for the most part, provided for comparability at the industry level. It was applied to establishments for the first time in the 1949 census of manufactures. In a number of industries, where the change in classification seriously disturbed the continuity, establishments were re-combined for the whole period covered by the index. The manufacture of synthetic rubber, for example, was transferred from the rubber industry to "miscellaneous chemicals". Plants engaged in the production for distribution of manufactured gas were transferred from "coke and gas" to the gas and electricity division. The salt industry was adjusted so as to comprise only processing operations for inclusion in the manufacturing division of the index. Three minor industries which were reclassified to non-industrial groups were dropped from the computation.

A special problem arose in connection with the dairy industries. Dairies whose primary activity is pasteurizing, bottling and selling fresh milk are classified in the retail trade division of the Standard Classification. At present those dairies which produce butter and ice cream are classified in the "Butter and Cheese" industry in the census of manufactures and the milk operations of these establishments are also included in the production statistics. As the work involved in the reclassification of the numerous establishments in this industry over the whole period would have been extremely heavy, the commodities milk and cream were simply dropped from the list of products. As it was possible to estimate quite accurately the materials consumed in the preparation of milk and cream for consumption, a figure of value added for the industry less milk and cream was computed and used in the computation of weights and in the construction of the net volume indexes.

The appropriate series in the manufacturing division were re-classified to obtain sub-indexes of economic significance. The movement of durable goods normally varies from that of non-durables. There tends to be greater fluctuation in durables from prosperity to depression, the demand for non-durables



being more constant. The manufacturing division was therefore divided, at the major group level, as between durable manufactures and non-durable manufactures. Although these groupings are rather rough and ready, they are of great use in economic analysis. The classification into producers' and consumers' goods, attempted in some countries, involves more difficulty as many intermediate commodities have alternate uses, and was not attempted in this work.

### Definition and Relation to National Income Accounting

It is generally agreed that an index of industrial production should measure the physical amount of "work done". Ideally, within the broad framework of the national economy, industrial production could be defined as the physical contribution of the industrial sector to net national income at constant prices. Due to the unavailability, for individual industries, of such data as depreciation and overhead expenses with which to adjust census statistics, it becomes necessary to limit our definition to a more measurable concept. Gross national product at factor cost comes closest to representing the concept involved in census "value added" which is gross selling value of production (excluding indirect taxes) less value of materials and fuel and electricity consumed in the production process. GNP at factor cost is net national income at factor cost plus depreciation. Census "value added" differs from this measurement in that, apart from certain variations in the statistical structure, it includes the cost of such services as insurance, advertising, transportation, communications, etc. In the compilation of the national accounts, the contribution of these services to GNP at factor cost is classified to the non-industrial sectors from which they originate. For instance, while insurance costs are part of the "value added" of the manufacturing industry as compiled by the Census of Industry, they are not part of the contribution of manufacturing to GNP at factor cost, but are assigned to the insurance industry. Thus the measurement of output based on census "value added" is mostly net within the industrial sector but introduces some duplication if it is used as an element of gross national product.

These considerations are important when the question of "weighting" the various components of the index arises. The weights represent the relative importance of each component according to a pre-determined measurement concept. It was decided to construct the revised index of industrial production in such a way that it would represent as accurately as the availability of data would permit, the physical contribution of the industrial sector (mining, manufacturing and electricity and gas) to gross national product at factor cost and at constant prices. Thus, when the field of direct volume measurement is broadened to include the other sectors of the economy, the industrial sector will become a component, net of duplication, within the national volume aggregate of gross product at factor cost.

As described in the section "Formulae and Weights" it was possible to arrive at a figure of GNP at factor cost only for the major groups mining, manufacturing and electricity and gas.

Due to the absence of a breakdown, by individual industries, of the cost of business services, it was necessary, **within each major group**, to limit our measurement to "value added" in constant prices. Thus, if the aggregate index is said to represent the volume of GNP at factor cost, it is assumed that, within each major group, the quantum of "value added" moves the same as the quantum of GNP at factor cost, and that "value added" weights for individual industries constitute a pattern similar to that of GNP weights. Though it was not possible to test the validity of these assumptions, it is felt that they have some merit inasmuch as, within a large group such as manufacturing which contains upwards of 160 separate industries, there is bound to be some canceling-out of discrepancies. Although the mining and the electricity and gas groups comprise fewer industries, the processes involved are more homogeneous than in manufacturing, and the cost of business services is likely to be a more constant proportion of value added.

### Gross and Net Output

The question arises: "Do existing indexes actually measure census value added in constant prices (i.e., the quantum of census value added)?" Most existing indexes of industrial production are constructed by projecting census "value added" in some year or group of years chosen as the base period by means of indicators based on gross constant dollars. If the index so constructed is considered a measure of the volume of net output or of value added, it is assumed that volume changes in products, materials and fuel and electricity have been identical. Doubtless, there are some industries to which this assumption can be broadly applied. However, experience has proven that for the majority of industries there occur significant variations over a period of years between output and input, variations that in some cases may be termed considerable.

There are a number of factors which influence the level of net output (final products less input of materials and fuel) as distinct from that of gross. Vertical integration of the manufacturing process, which occurs more often in industries turning out highly processed goods, is an important influence. A firm producing cotton cloth, for instance, may decide to make its own yarn from the raw fibre, instead of buying it from yarn manufacturers. The measurement of cloth output will not reveal this increased fabrication. Again, a beet sugar manufacturer may install machinery that permits him to extract a greater proportion of sugar per pound of beets. Although the index based on sugar production will reflect an increase in output, it will understate the increase in net output since inadequate account is taken of the proportionate gain in processing.

A more common occurrence is where an industry making a variety of products shifts some of its production to goods requiring a higher or lower degree of fabrication. In the meat-packing industry, for instance, the production of canned and cured meats in recent years has increased greatly in comparison with that of fresh meats, which require less fabri-



cation. Here again, the measurement of gross output will reveal some gain, but not in sufficient proportions.

It must be noted, however, that the degree of divergence between net and gross output depends frequently on the number of different products included in census industry classifications. The finer the industrial breakdown the more accurately will shifts in production be reflected in a composite gross index. In the example cited, for instance, if a separate census industry classification for canned meats had been available, a net value-weighted composite gross index of the two sections (i.e., fresh meats and canned and cured meats) would have been much closer to the corresponding net index which is the desired measure. As this breakdown was not available, it was necessary, in the products index, to base the relative importance of each section on gross value. Gross value weights, in this instance, are not proportional to "value added" weights and the shift in output to canned and cured meats contributed to the marked difference between the gross and net production indexes. It is thus often impossible to obtain these finer breakdowns as a great number of establishments produce a variety of goods requiring varying degrees of fabrication. But in cases where the industry classification covers a wide field of operations and the construction of a net index is not possible, it is advisable to attempt a finer breakdown. In the Canadian Census of Industry, for instance, the industry "Electrical Apparatus and Supplies" was recently divided into five sub-industries. Thus each section will have a separate "net value" weight instead of a weight based on gross value. The resulting composite index for this group of industries will thus be closer to "net" output, even though the index for each section is based on gross production.

Unfortunately, for most countries, the data necessary to measure net output are not available. To measure movements of physical net output requires both quantities and values for products, materials used and fuel and electricity consumed. Canada is fortunate in having an annual Census of Industry in which, for the majority of industries, statistics on volume and value of all three factors are collected. The Business Statistics Section of the Bureau, therefore, proceeded to construct, as far as available data would permit, an annual index of the "net" volume of manufacturing production for the period 1935 to 1947. The method used was similar to that adopted by Dr. R.C. Geary and Solomon Fabricant in their research on the subject. It consisted of subtracting from the volume aggregates of production the volume aggregates of materials and fuel and electricity. This procedure eliminates duplication, as double-counting, appearing both in products and materials, is cancelled out. It was not possible to obtain direct measures of net output for all manufacturing industries. The output of many industries is not measurable in quantitative terms, and the data for some others were not found suitable. A high degree of accuracy in the data reported is essential, especially for industries with a high input-output ratio. Here, the net aggregate is very sensitive to even small errors in either products or materials.

Annual indexes of net output were computed for 56 Canadian industries which accounted for nearly 50 per cent of the total net value of manufacturing production in 1947. Non-durable industries made up 40 per cent of the total, while durables, which are more difficult to measure quantitatively, accounted for 10 per cent. In 1943, during the peak of wartime activity, the composite net output index for the 56 industries was four per cent higher than the gross. In 1947 the difference had narrowed to 2.5 per cent. In the latter year, the net index was higher in 30 cases and lower in 26.

While, on balance, these results do not appear overly significant, the differences between net and gross output for individual industries and for certain groups of industries is often considerable. Usually, the gap is greater in those industries with a high input-output ratio such as meat-packing, dairy products and flour and feed milling, where even relatively slight changes in integration or in the composition of production are magnified when a net measure is computed. An example is the butter and cheese industry, the main products of which are butter, cheese and ice cream. This industry has a very high input-output ratio, materials and fuel accounting for about 84% of the gross value of production. Because of the homogeneity of products and materials, it was possible to obtain a rough measure of value added for each of the principal products. During the base period the value of milk and cream used in the production of butter accounted for 89% of the selling value; milk requirements for the cheese produced also amounted to about 89% of the value of production, while the ingredients for ice cream and ice cream mix only accounted for approximately 44% of their selling value. Thus, the value added per unit of output was much greater for ice cream than for either butter or cheese. Indeed, if a hypothetical industry made up of these three items alone were constructed, the value added weights in the base period would be distributed roughly as follows: butter 54%; cheese 15%; and ice cream 31%. If, however, the relative importance of each product were established from its gross selling value in the base period, as is the case in most existing indexes, the weights would then be apportioned in this way: butter 73%; cheese 19%; and ice cream, only 8%.

In other words, on a gross basis the true weight of ice cream is greatly understated, while that of butter is exaggerated. This, of course, would have little or no effect if the output of the three products showed the same proportionate increase or varied little. But, as actually happened, ice cream output in 1947 was 168% greater than in the base years 1935-39, while the production of butter and cheese rose only 15% and 3% respectively. Measured on a gross basis then, the effect of the large increase in the output of ice cream on the total index was considerably reduced. As a matter of fact, if gross and net indexes are computed for 1947 for the three products, the gross index is 125 and the net index 151, or 21% higher.

It is readily admitted that this industry is an exception and that not all gross measures will compare so unfavourably with net output. While it is not possi-



ble as in the above example to determine with accuracy for all industries the influence of each item of production on net output, analysis of some of the other industries supports the conclusion that significant discrepancies do exist. In the tobacco products industry, the proportionately greater increase in the production of cigarettes as compared with smoking tobacco contributed to a greater ratio of net output to gross output. In 1947 the former was 6% higher. A similar situation was observed in the brewing industry. The production of bottled beer advanced more rapidly than that of bulk beer, a product with a lower work content.

Not all industries, however, show a higher net output figure. Some, like the flour and feed milling industry, show an opposite trend. Here, gross output was consistently higher than net for the period covered. To a certain extent the difference was due to a progressively growing production of a cheaper quality of flour while the proportion to total flour output of the better grades was dropping. Changes in the composition of production as between flour and other products made in the industry also contributed to the divergence. The gross output of this industry in 1947 was 18 per cent higher than the net.

There are other factors which may have had an influence on the level of net output, such as changes in vertical integration, more efficient handling of materials and fuel, changes in the nature or types of ingredients accompanying changes in the "product mix", changes in the yield of materials consumed due to technological advances. It is not now possible to assess the ultimate effect of these factors on net volume of production. There can be little doubt that they resulted in some modification. However, it seems evident that at least for industries with a high input-output ratio, shifts in the type of products fabricated was the main influence. It is impossible, of course, from available statistics, to measure the net effect on industrial efficiency of these shifts in the content of production. A closer appraisal could be obtained if true net output or contribution to net national income could be measured directly. A higher net output as computed with Census of Industry data may have been obtained at the expense of greater capital investment or higher outlays for advertising for instance.

It is not possible to apply the net volume concept to the index of industrial production on a monthly basis. The necessary information is only available annually and then only after a lag of one year or so. However, indexes based on net output can serve as bench-marks for the monthly series which are used for interpolation and projection. It is not likely that, in normal times, differences between net and gross output will be important over a period of a year or two.

Due also to the considerable disparities that are caused by shifts in the content of production, more attention should be devoted to proper weighting within industries where a variety of series with suspected differences in values added per unit of output are used to measure monthly fluctuations. It was possible, for instance, in the revised monthly index, to estimate value added weights for the various commodities used to measure the volume of production in the butter and cheese and flour and feed milling industries. This resulted in a much closer approximation to annual net output levels for these industries than if weights based on gross selling values had been used.

## Formulae and Weights

### (a) Formulae Used.

The formulae used in all computations of the new index are of the base-weighted Laspeyres type. In constructing individual industry indexes from annual Census of Industry data, the form was that of a relative of aggregates in which unit values at the plant during the period chosen as the base were used to fix the relative importance of each item. The algebraic expression is  $\frac{\sum q_1 p_0}{\sum q_0 p_0}$  where  $q_1$  and  $q_0$  repre-

sent the physical volume of a commodity in a given period and in the reference-base period respectively and  $p_0$  represents the value per unit of each commodity in the weight-base period<sup>1</sup>.

In combining individual industry indexes into major groups and sub-groups, the form adopted was that of an arithmetic average of relatives in which value added in the weight-base period (gross value less materials and fuel and electricity used) was used to represent the relative importance of each industry. This formula is  $\sum \left[ W \frac{q_1}{q_0} \right]$  where  $W = \frac{q_0 p_0}{\sum q_0 p_0}$  and  $\frac{q_1}{q_0}$  is the index of production for each industry.

The value added of each industry in the weight-base period is represented by  $q_0 p_0$  while  $\sum q_0 p_0$  represents the sum in the weight base period of the values added of the group of industries being combined so that  $\sum W$  equals unity. This form is also used in the computation of the monthly index of industrial production.

It is readily apparent that the two formulae shown above are identical. However, the average of relatives form offers considerable advantage in computation and in the adaptability of the components for purposes of interpretation and analysis. The figures show the exact contribution of each component series in terms of points in the total index and can be easily combined into any desired composite.

1. For ease of interpretation and analysis it is generally preferable that the year chosen for the weight base be also the reference base. However this is not a hard and fast rule. If it is found convenient, a weight-base different from the comparison base can be adopted. For instance, if the year 1949 were chosen as a weight base appropriate for post-war comparisons, and the post-war index, based on 1949, were linked to the index representing the pre-war and war periods on the weight reference-base of 1935-39, the latter may be retained as the reference base, although the weights in the current period would be based on 1949. Again, the reference base may be changed without changing the weight base. Here the process is more mechanical; given the series on the weight-base as 100, all that is done is to divide through by the value of the index in the selected comparison base.

We now turn again to the formula used in the computation of individual industry indexes. In the construction of the "net volume of output" indexes the formula is as follows:

$$\frac{\sum Q_1 P_0 - \sum q_1 p_0}{\sum Q_0 P_0 - \sum q_0 p_0}$$

in which Q and P stand for the quantities and unit values of final products and q and p stand for the quantities and unit values of materials and fuel and electricity consumed in the production process. The resulting "net" aggregates of both numerator and denominator have, of course, the same base-weight characteristics as each of the components.

There are other formulae that can be used in the construction of production indexes. The current-weighted Paasche type index in which unit values added or unit values in any given year are assigned as weights reflects the relative importance of the components in the "current" year. Thus, a different set of weights enters into every comparison, and theoretically, the formula is only good for comparison between the current year and another year chosen as the base. This formula in its relative of aggregates form is

$$\frac{\sum q_1 p_1}{\sum q_0 p_1}$$

and in its average of relatives form is  $\frac{1}{\sum \left[ W \frac{q_0}{q_1} \right]}$  in

which  $W = \frac{q_1 p_1}{\sum q_1 p_1}$  and  $\frac{q_0}{q_1}$  is the reciprocal of the

index of production for each industry or for each product.

In the Laspeyres formula, the use of fixed weights throughout a period of years has the effect of retaining the industrial structure which existed in the weight-base period. It might be argued that such a structure almost immediately becomes out of date, as the relationship of individual products within industries or of individual industries within broader groups is constantly shifting. Usually these shifts are due mostly to increases or decreases in the actual quantities of goods produced and the index, of course, fully reflects changes in the volume of output. But the assumption inherent in the use of the Laspeyres-type formula is that values added or values per unit of output show no change, or change by the same proportion. That relative changes in unit values do occur is readily admitted, and it is also probable that the distortion caused by these changes could assume some significance over an extended period of years. The Paasche-type formula is based on a current weight structure but involves an excessive volume of work and tends to distort comparisons between years other than the base and weight years. Changes due to variations in unit values or values added are likely to be of little importance over a short term of years, and there is little doubt that the Laspeyres formula is the most practical and easily-understood for current series of industrial production. Although subject to certain mathematical aberration it represents a simple concept which permits comparisons between any years of the period covered.

Where the index covers an extended period of time, however, some adjustment is necessary to allow for changes in the weight structure. An example of such changes through time is the disturbance in the price structure that usually follows the introduction of new products. When radios first appeared on the market, for instance, their price was relatively high. As the market expanded, mass production and new techniques made possible reductions in prices and in unit net values. Thus, the importance of each radio receiving set was much less relative to other products in 1950 than it was in 1928. These comments emphasize what is frequently called the "Index Number Problem" which is the problem of choosing the correct weighting system. The weights should be changed whenever they have altered to such an extent that the current month-to-month and year-to-year changes of the index as well as the level over the base period are affected. A greater latitude can be allowed in historical comparisons such as pre-war, post-war comparisons, because the analytical uses of such comparisons would not normally require absolute accuracy. That is to say, the same analytical conclusions might be drawn whether the indexes were exact or approximate. On the other hand, the current movements are subject to much closer scrutiny. For these reasons a new post-war weighting system for the index of industrial production is being developed.

#### (b) Base Period

The present revision of the index does not incorporate new post-war weights for individual industries; at the time the revision was inaugurated, the census of industry results for 1947 were the latest available, and it was not felt that 1947 was a suitable year on which to base a weighting pattern. Prices were still undergoing strong shifts as a result of decontrol and price relationships were bound to be disrupted. It has been agreed that the calendar year 1949 is the most satisfactory general post-war reference period for Bureau index numbers. In selecting a base period it is preferable to choose a single year rather than a compromise of several years. Apart from the extra work involved in averaging, it is difficult to describe exactly the effects of the weighting pattern in an index with a broad base. On the other hand, if a single year is chosen, conditions prevalent at the time of weighting are easier to define and to analyze. The general public will also find it easier to relate a certain level of production to, say, 1949 than to 1947-1949. The next revision of the production index will incorporate the new base both as a reference base and a weight base.

#### (c) Industry Weights

The new index of industrial production herein presented is based on a 1935-1939 industrial weighting pattern<sup>1</sup>. That is, within each main division of

1. As explained in a later section, the weights within individual industries were changed in several instances in order to allow for new products and different classifications.



the index, the relative importance of each census industry is fixed according to the average census "value added" during these five years. In order to test the validity of the weighting system at the industry level in the post-war period, a computation was made whereby the volume index of each manufacturing industry on the pre-war base was expressed in 1935-1939 as an index with a 1947 reference base

and weighted with 1947 weights according to the census value added figures for each industry in 1947. The indexes for total manufacturing and its main components were thus computed for the period 1935-1939 on a 1947 base. The percentage increase, between 1935-1939 and 1947, could now be compared, using 1947 weights with that using 1935-1939 weights. The results are shown in Table I.

**TABLE 1. Effect of Change in Industry Weights**  
Manufacturing Industries

Group	Weights		Index in 1947 1935-1939 = 100 Net		Index in 1947 1935-1939 = 100 Gross	
	1935-39	1947	1935-39 Weights	1947 Weights	1935-39 Weights	1947 Weights
Foods .....	14.892	11.693	181.5	177.6	173.4	169.5
Beverages .....	4.167	3.912	249.4	245.8	239.0	237.2
Tobacco and Products .....	1.771	1.160	211.9	212.0	202.3	202.4
Rubber Products .....	2.786	2.628	230.7	230.7	245.7	245.7
Leather Products .....	2.309	2.042	148.7	148.3	147.4	147.2
Textiles (ex Clothing) .....	5.658	4.975	172.9	172.5	170.1	169.9
Clothing (Textile and Fur) .....	7.107	7.082	147.7	147.8	149.8	149.8
Paper Products .....	8.701	10.449	207.4	201.3	197.6	192.5
Printing and Publishing .....	5.996	4.192	163.3	162.9	163.3	162.9
Wood Products .....	5.940	8.569	195.6	187.4	196.1	188.0
Iron and Steel Products .....	11.417	13.709	249.9	249.4	248.6	247.8
Transportation Equipment .....	6.749	8.629	239.5	225.4	239.5	225.4
Non-ferrous Metal Products .....	7.600	4.881	182.8	193.2	184.0	193.3
Electrical Apparatus and Supplies .....	3.432	4.734	316.8	316.8	316.8	316.8
Non-metallic Mineral Products .....	2.652	2.689	269.8	259.1	266.5	256.9
Petroleum and Coal Products .....	1.872	1.689	181.2	184.9	181.4	185.0
Chemical Products .....	5.742	5.655	245.5	248.3	242.4	244.4
Misc. Manufacturing Industries .....	1.209	1.312	233.4	229.5	233.4	229.5
<b>Total Non-durables .....</b>	<b>61.001</b>	<b>55.477</b>	<b>191.2</b>	<b>186.0</b>	<b>187.2</b>	<b>182.2</b>
<b>Total Durables .....</b>	<b>38.999</b>	<b>44.523</b>	<b>233.5</b>	<b>228.2</b>	<b>233.2</b>	<b>227.8</b>
<b>Total Manufacturing .....</b>	<b>100.000</b>	<b>100.000</b>	<b>207.7</b>	<b>202.8</b>	<b>205.1</b>	<b>200.1</b>

CHART I

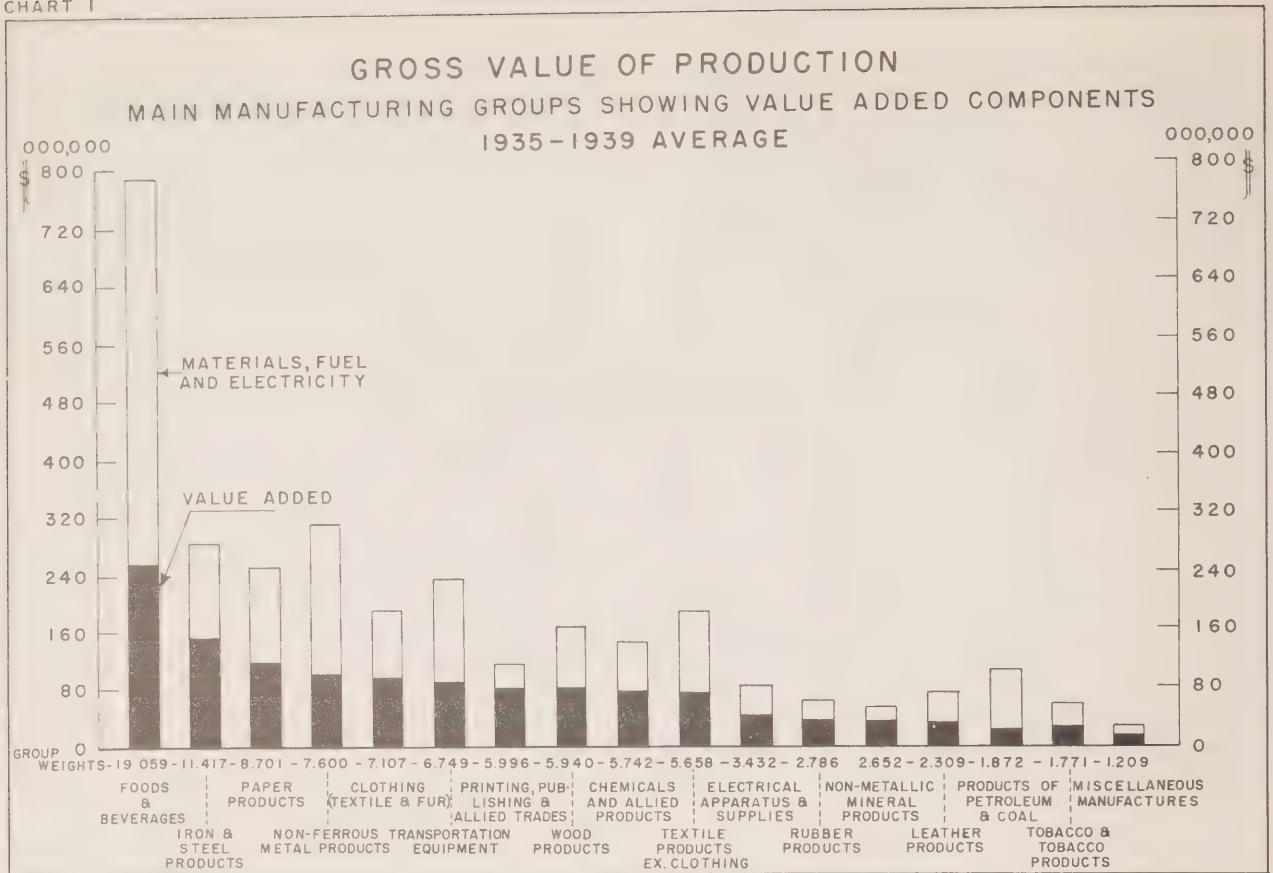
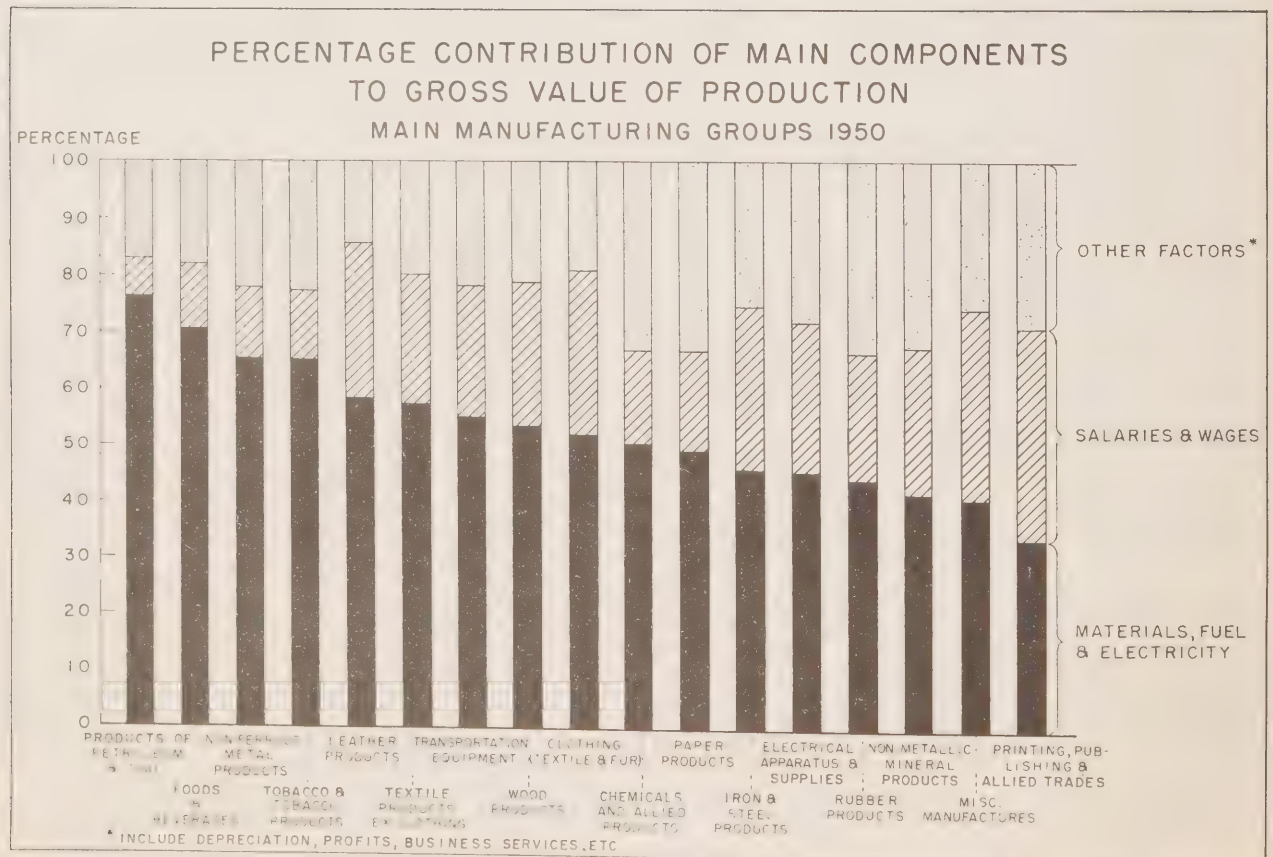


CHART II





It will be noted that the base-weighted index is higher by 2.4 per cent than the index based on 1947 weights. This is characteristic of base-weighted production indexes. Rapid gains in output in new or expanding industries are usually accompanied by declines in relative prices or relative values added per unit of output. This results in an upward bias in Laspeyres-type indexes when these are viewed in the light of results based on a more up-to-date weighting pattern. When lower relative values added are applied to the higher volume indicators of expanding industries in a currently-weighted index their influence on the total aggregate is somewhat mitigated, thereby tending to lower the combined index. Thus, while the net volume index of rubber products in 1947, at 231, was considerably higher than the all-manufacturing index of 208 the relative importance of the industry, based on census value added, dropped from 2.8 per cent of total manufacturing in the period 1935-1939 to 2.6 per cent in 1947. The same observations can also be applied to the movements of industries within industry groups and of individual products within industries. There are exceptions, of course, which offset to a certain extent the effects of these general trends. For instance, the paper products group index in 1947 had risen to about the same level as total manufacturing, yet its relationship to the other industrial groups as indicated by census value added advanced from 8.7 per cent in 1935-1939 to 10.4 per cent in 1947. Thus its value added per unit of output had gained significantly over the period. Similarly, although the volume of output of transportation equipment had increased considerably more than the average, unit value added nevertheless showed a fair advance. On balance, it was felt that the difference in the total manufacturing index of 2.4 per cent resulting from the use of the 1947 weighting pattern was not large enough to warrant a change in the weighting system in 1947. The use of one of the so-called "cross-weight" formulae such as the Fisher "Ideal" or the Marshall-Edgeworth would have resulted in a difference of only a little more than one per cent and this is well within the limits of reasonable accuracy in indexes of this type.

It is emphasized, however, that this study of the influence of current weights on the index, was made at the industry level. The results do not reflect variations in unit values of individual commodities within industries. Thus, the index of the rubber products industry based on 1947 commodity weights may well be different from the base-weighted index shown in the table. However, the products indexes of several industries in the foods group were tested at the commodity level, and only minor differences were revealed. It is admitted that these tests are only representative of one group in the manufacturing sector, and that it is possible that significant differences could be brought to light in other industries, but it is also likely that there would be some offsetting as occurred in relationships at the industry level. As indicated above, the decision not to consider 1947

weights in the construction of the index, was also influenced by the fact that Canadian price relationships in that year were not considered sufficiently representative of the post-war period. It is felt that 1949 will offer a much superior base for a change in weights, and the problem of linking the present index with that using the 1949 weights will be considered at the time of the next revision covering the post-war period<sup>1</sup>. From then on, in line with the recommendation of the Statistical Office of the United Nations, the weighting system will be thoroughly reviewed every five years. At the time of each review, a decision will be made as to the desirability of changing the weight base.

#### (d) Major Group Weights

While it was necessary, due to the unavailability of data, to confine the measurement concept to that of census "value added" within each of the three principal sectors of the index, it was found possible to refine it to "gross national product at factor cost" at the main division level, as indicated previously, in accordance with the recommendation of the UN Statistical Office. From the breakdown, by main industrial groups, of Canada's national income statistics, the contribution to GNP at factor cost of mining, manufacturing and electricity and gas was estimated in the 1935-1939 weight-base period. Care was taken to assure as much comparability as possible in classification with industrial divisions of the Census of Industry, from which the basic data for the index were obtained. Census principal statistics are compiled on an establishment basis, i.e., each unit of a company is treated as a separate entity and classified to the industry in which it operates. A company may own several establishments which are classified to different industrial divisions. In national income accounting, salaries, wages and supplementary labour income and income of unincorporated business are compiled on an establishment basis, and as such, their classification follows that of the Census of Industry. Corporation profits, other investment income and depreciation, on the other hand, necessarily are classified on a company basis. It would be extremely difficult to get an accurate breakdown of these factors for multi-unit companies on a plant-by-plant basis. No difficulty arises if the different establishments operate within a single field, e.g., manufacturing, as we are concerned only in allocating GNP at the major group level. Several large companies, however, cross these major group lines. Many pulp and paper firms, for instance, operate their own logging establishments. In the Standard Industrial Classification the latter are classified to forestry. As statistics on profits, investment income and depreciation are available only on a company basis, that portion of these factors which originates in forestry is included in the manufacturing sector where these companies are classified. Similarly the profits, investment income and depreciation data of several major mining companies which operate smelting and

1. As the effect of changing weights at the individual item level will then be known, the use of cross-weights (an average of the 1935-1939 and the 1949 weights) in linking the present index with the 1949-weighted index in a year of overlap will be given serious consideration.



refining establishments in the manufacturing sector are assigned in total to the mining division. It was thus necessary to find some means of pro-rating these factors over the industrial groups affected. Admittedly, no known statistical procedure will result in absolute accuracy in this adjustment, but we are concerned here mainly in obtaining a classification which reflects a truer breakdown of industrial activity. As the breakdown by establishments of salaries and wages for those companies which cross industrial group lines was available, it was possible to allocate roughly the profits of these firms to their respective industrial groups according to the distribution of salaries and wages. The amounts of "other investment income" involved were negligible and no adjustment was attempted. Depreciation was allocated on an arbitrary basis, the bulk (90%) being assigned to the manufacturing sector as it is applied mainly to plant and equipment which are of relatively minor importance in primary operations. Although the resultant figures are rough approximations, they

contribute a relatively minor proportion to GNP at factor cost of the industries concerned, and they are no doubt nearer the desired breakdowns than the unadjusted figures.

It was possible in this way to obtain GNP at factor cost weights for the main groups mining, manufacturing and electricity and gas. Within each sector, these weights were, in turn, allocated to individual industry groups and then industries according to census "value added". Within those industries for which only "gross volume" indexes could be constructed, census value added was allocated, implicitly, to individual items according to their gross value, as it is not possible, except in rare cases, to assign value added directly to each product of an industry. In industries for which "net volume" indexes were constructed, the results approximate those which would have been obtained if values added had been used as weights for the industries' products.

Table II. Industrial Production

1935-1939 = 100

Main Group Weights

Main Groups	Weights According to Value Added	Weights According to GNP at Factor Cost
<b>Mining .....</b>	<b>100.000</b>	<b>16.752</b>
Metals .....	69.316	
Fuels .....	19.149	
Non-Metals .....	5.606	
Quarrying and Sand Pits .....	5.929	
<b>Manufacturing Industries .....</b>	<b>100.000</b>	<b>75.665</b>
Non-durable Manufactures .....	(61.001)	
Foods and Beverages .....	19.059	
Tobacco and Tobacco Products .....	1.771	
Rubber Products .....	2.786	
Leather Products .....	2.309	
Textile Products (ex. Clothing) .....	5.658	
Clothing (Textile and Fur) .....	7.107	
Paper Products .....	8.701	
Printing, Publishing and Allied Trades .....	5.996	
Products of Petroleum and Coal .....	1.872	
Chemicals and Allied Products .....	5.742	
Durable Manufactures .....	(38.999)	
Wood Products .....	5.940	
Iron and Steel Products .....	11.417	
Transportation Equipment .....	6.749	
Non-ferrous Metal Products .....	7.600	
Electrical Apparatus and Supplies .....	3.432	
Non-metallic Mineral Products .....	2.652	
Miscellaneous Manufactures .....	1.209	
<b>Electricity and Gas .....</b>	<b>100.000</b>	<b>7.583</b>
Electric Power .....	91.681	
Manufactured Gas .....	8.319	
<b>Total Industrial Production .....</b>	<b>—</b>	<b>100.000</b>

The process of subtracting, in total, materials and fuel in constant dollars from gross value in constant dollars gives the same result as if individual values added in constant dollars had been summed. The difference between this method and that of applying fixed "value added" weights (if these were available) to individual products is that the weighting pattern in the latter method would be that of the base period and would not reflect any changes in the amount of processing (e.g., changes in integration) in subsequent years. It would, however, reflect shifts in the composition of production more accurately than by using value weights.

The ideal, of course, would be a weighting system based on GNP at factor cost for each individual industry. At the moment, this is not possible. Research, however, will be directed towards obtaining a finer industrial breakdown of GNP, at least to the industry group level, i.e., foods and beverages, clothing, etc. Meanwhile, the present set-up, although approximate, is not believed to distort seriously the movement or the level of the overall index.

### Other General Problems and Limitations

#### (a) Changes in Quality

A deficiency characteristic of production indexes is their failure to reflect changes in quality. Many manufactured products, over the years, have been improved as a result of continuing research and invention. A 1951 radio receiving set, for instance, has a wider range, a clearer, smoother tone and generally is a better instrument than it was in 1925 when radios were first produced in Canada. Similarly, automobiles have improved considerably in design and performance over the years. To the extent that these trends have developed, the production index will have a downward bias, as there is no satisfactory statistical procedure of accounting for these intrinsic changes in quality.

#### (b) Census Classifications

Another problem closely allied to that of quality is the lack of sufficient detail in many Census of Industry classifications. Commodities are often combined into broad classes such as refrigerators, men's suits, etc., despite the fact that many different types, sizes and qualities of these goods are produced. It would be quite impossible, of course, to collect quantity data on every specification pertaining to the great mass of commodities turned out by manufacturing concerns. No problem would exist if it could be assumed that the relative proportions, within such classes of goods, of different types, sizes, etc., remained constant over the period covered by the index. However, consumers' tastes and habits change over the years, and manufacturers are governed accordingly. Indexes based on heterogeneous groups of products would ignore these variations. If, for instance, the proportion of the smaller type of domestic refrigerators has risen over the period, then the quality of the group "refrigerators" may be said to have declined. The best approach to solving this

problem is through the use of appropriate price indexes. Changes in specification are usually reflected in value totals; if such a total is deflated by a price index based on a definite specification of the item in question, the resulting aggregate will reveal the true change in physical output. The assumption implicit in this procedure is that prices of all specified types of the product move in the same way and that price levels reflect differences in specification. This assumption is safe enough in normal times and over a reasonable span of years. The difficulty is in obtaining appropriate price indexes based on sufficient detail. Most existing price indexes fail to take account of the more complex products of industry, and are based on prices at the wholesale or retail level thus often reflecting variations in the rate of mark-up. In the revised index, where it was apparent that inaccuracies would have resulted from incorporating broad classifications, quantities were ignored and recorded values were deflated with proper price or unit value data, when these were available. For the majority of industries, however, there was sufficient census detail to support the assumption that no serious error in the overall index resulted from the above-mentioned difficulty. This does not preclude the desirability of improving present commodity data in census of industry returns. The indexes for several industries would have been more accurate if more detailed breakdowns had been available. In several industries, finer breakdowns of commodities were introduced from time to time during the period covered by the index. Advantage was taken of those improvements in census schedules in the construction of the index, even though it meant changing the weight-base within those particular industries and linking the subsequent levels to those of the previous period. The distortion introduced by this procedure is likely to be less serious than that of continuing to base the indexes on the movements of heterogeneous groups of commodities, especially in periods where there occurred significant shifts in the nature of the components of these groups.

#### (c) Changes in Coverage

A limitation common to most indexes of physical output is the lack of complete coverage either for individual industries or for groups of industries. Except in rare cases, industrial census returns do not cover all of the products of an industry. Some of these commodities either cannot be measured quantitatively or, taken singly, are of such minor importance that no separate information is requested. These are usually included in a "miscellaneous" section and values only are recorded. The use of prices or unit values again presents itself as a solution to the problem. If prices or appropriate unit values are available for an adequate proportion of the products of an industry, it can be reasonably assumed that prices of the remaining products move approximately in the same way. Thus, by deflating the value of the unrepresented products with price data derived from recorded commodities, the effect of total coverage is obtained. It is generally agreed that this procedure is more valid than to assume that changes in the



volume of reported commodities represent changes in the volume of all commodities. The proportion of represented commodities is often subject to wide variations due to the introduction of new products for which no comparable data are available in the base period or to changes in the number of items for which information is requested in census questionnaires.

It is a characteristic of the fixed-weight formula used that only by dividing the given value of production by a currently-weighted (Paasche) price index will the desired base-weighted aggregate ( $Q_1 P_0$ ) be obtained. The algebraic operation is as follows:  $\sum Q_1 P_1 \div \frac{\sum P_1 Q_1}{\sum P_0 Q_1} = \sum Q_1 P_0$ , in which  $\sum Q_1 P_1$

represents the total current value of production of any given industry and  $\frac{\sum P_1 Q_1}{\sum P_0 Q_1}$  represents the

Paasche-type price index of all the commodities or of a representative number of commodities in the same industry. In the actual construction of the indexes, a short-cut method, the so-called "coverage-adjustment" technique, was utilized. This consists in dividing the aggregate in constant prices of the represented products of an industry by the ratio of the current value of represented products to the total current value of the industry. This has the same effect as dividing the total current value by a Paasche-type unit-value index based on the represented commodities, as follows:

$$\frac{\sum Q_1 p_0}{\sum Q_1 P_1} \div \frac{\sum q_1 p_1}{\sum q_1 p_0} \text{ or } \sum Q_1 P_1 \div \frac{\sum q_1 p_1}{\sum q_1 p_0}$$

in which  $\sum Q_1 p_0$  represents the aggregate in con-

stant prices of the represented products of the industry,  $\sum q_1 p_1$  the current value of the represented products,  $\sum Q_1 P_1$  the total current value of the industry and  $\frac{\sum q_1 p_1}{\sum q_1 p_0}$  the Paasche-type unit value

index of the represented products of the industry.

The decision was taken, however, not to use the "coverage adjustment" procedure when, in general, the proportion of represented products was less than 50 per cent of the total value of production in any particular industry. In such circumstances, the assumption inherent in the use of prices becomes increasingly subject to error. The measurement of materials used deserves special mention in this connection. In the construction of "net volume" indexes, and for certain industries where quantity data on commodities were deficient or not available, it was necessary to measure the volume of materials used, and, consequently, to adjust for unrepresented materials. As these materials originate in many different industries, in other sectors of production and even in other countries, they are subject to varying economic forces. The assumption that a fifty per cent representation is sufficient to measure price movements in these cases can be highly questionable. Generally, a much higher coverage is required, depending on the nature and origin of the unrepresented commodities. Fortunately, as the following table indicates, the annual indexes presented herein were based, in the majority of cases, on a high coverage. No serious discrepancies are likely to have occurred from the use of the "coverage adjustment".

**Table III. Industry Coverage Ratios<sup>1</sup> 1935-1939 and 1947**  
Manufacturing Industries

Frequency distribution of coverage ratios	Non-durables				Durables				Total Manufacturing			
	Number of industries		Percentage of census value added represented		Number of industries		Percentage of census value added represented		Number of industries		Percentage of total census value added represented	
	1935-1939	1947	1935-1939	1947	1935-1939	1947	1935-1939	1947	1935-1939	1947	1935-1939	1947
Percentage:												
51- 55 .....	1		.2						1		.1	
56- 60 .....		1		.1	1	1	1.7	.2	1	2	.7	.1
61- 65 .....	2	1	.2	.2	1	2	3.7	.2	3	3	1.5	.2
66- 70 .....	1		.1		1	4	2.1	6.9	2	4	.8	3.1
71- 75 .....	1	4	.7	2.8	1	3	.6	3.9	2	7	.7	3.3
76- 80 .....	3	3	.7	1.4	7	3	5.5	1.1	10	6	2.5	1.3
81- 85 .....	4	7	1.7	1.0	7	6	2.9	11.0	11	13	2.2	5.5
86- 90 .....	9	8	3.1	7.5	6	6	6.8	7.4	15	14	4.5	7.5
91- 95 .....	8	17	10.6	20.3	6	4	7.8	2.5	14	21	9.5	12.4
96-100 .....	49	40	69.4	61.7	9	8	30.7	18.3	58	48	54.4	42.3
<b>Totals .....</b>	<b>78</b>	<b>81</b>	<b>86.7</b>	<b>95.0</b>	<b>39</b>	<b>37</b>	<b>61.8</b>	<b>51.5</b>	<b>117</b>	<b>118</b>	<b>76.9</b>	<b>75.7</b>
Average coverage of non-durable industries represented: 1935-1939 - 96.2 1947 - 94.8												
Average coverage of durable industries represented: 1935-1939 - 89.3 1947 - 86.5												
Average coverage of all industries represented: 1935-1939 - 94.1 1947 - 92.3												
Average coverage as a proportion of value added: 1935-1939 - 96.2 x 86.7 = 83.4 1947 - 94.8 x 95.0 = 90.1												
Average coverage as a proportion of value added: 1935-1939 - 89.3 x 61.8 = 55.2 1947 - 86.5 x 51.5 = 44.5												
Average coverage as a proportion of total value added: 1935-1939 - 94.1 x 76.9 = 72.4 1947 - 92.3 x 75.7 = 69.9												

1. In recording coverage ratios for use in this table, ratios for products or materials were used, depending on type of indicator.

In cases where "net" aggregates were constructed, the coverage ratio of the products component only was used.



**(d) Inventory Changes**

The problem of inventory changes, relative to output, of goods in process, did not cause great difficulty in the construction of the annual indexes. For many industries this consideration has little or no importance as the manufacturing process is of relatively short duration. For industries, however, such as shipbuilding, aircraft, railway rolling stock and structural steel, the stock-piling problem is significant. Information on the value of goods in process for these industries was recorded in industrial census returns, and, where it was possible to use production data in constructing the indexes, adjustments were made to the value of completions to account for any changes in the amount of work in process. In the case of the monthly index, however, sufficient information to overcome this difficulty is usually not available, and, where serious discrepancies would occur, series other than completions must be sought. An adjustment for changes in finished goods inventories was made for only one industry, meat packing, for which it is definitely known that plants report shipments, not production.

**(e) Variations in Business Fiscal Years**

Variations in the period covered by individual plant returns were necessarily ignored. It has been estimated that about 85 per cent of Canadian manufacturing firms report their annual data to the Bureau on a calendar-year basis. The operations of the remaining 15 per cent are on a fiscal-year basis, but as long as they report consistently from year to year and that the statistics on employment, earnings, production and materials relate to the same twelve-month period, no double-counting will materialize. No attempt was made to adjust for possible discrepancies in the absolute level of output in any one year which may have arisen from this practice.

**Types of Indicator****(a) Net Output**

As the desired measure for individual industries is one which reflects the physical amount of "work done", the choice of indicator will necessarily be based on its ability to represent this concept.

The indicator which comes closest to measuring this ideal, is of course, the volume of net output. As it is only possible to compute such series on an annual basis, and then only for a certain number of industries, it becomes necessary to construct alternative relatives for use in the monthly index and in some sectors of the more comprehensive annual benchmark series.

**(b) Gross Output**

In the absence of net output data the first alternative was the volume of gross output or final products of an industry. When this indicator is used, however, certain considerations must be kept in mind. One difficulty, of course, concerns changes in the amount of processing applied to raw materials

and was discussed previously. Where the "gross" indicator was actually used to represent work done, care was taken to check carefully for any changes in processing, and it was possible in several instances to make adjustments, either by changing the relative importance of a particular product which differed considerably in work-content or by subdividing the industry into groups of firms producing commodities requiring roughly the same amount of fabrication. These separate groups were then individually weighted with their respective values added, thus obtaining a result which more closely approximated net output. Another problem which arose in a few industries was that of changes in the amount of duplication. Wherever there appeared evidence that the products of some firms were subsequently used as materials by other firms in the same industry, the data were examined for any signs of disturbance in the normal flow of the commodities affected. In the industries most seriously affected by the duplication problem, such as wire products, primary iron and steel, fertilizers, etc., it was possible to construct "net output" aggregates, and the problem was solved automatically.

**(c) Materials Used**

When production data were not available or proved deficient, the third choice as an indicator of net output was the volume of materials consumed. In most cases, materials are less reliable than products, and except where one or two homogeneous materials constitute the bulk of materials used, they should be used as sparingly as possible. The same care, of course, had to be exercised, as in the case of products, in checking for changes in the amount of processing. In some cases, when several materials were involved, it was necessary to make adjustments for basic changes in the nature of materials used: during the war, for instance, because of shortages or shipping difficulties, producers in a few industries had to resort to substitutions. If changes in the amount of fabrication, the degree of integration or in the composition of production result in changes in the ratio of net output to gross output, the index based on final products will always be closer to net output than an index based on materials.

**(d) Man-Hours**

For some industries, the only direct means of approximating work done was through man-hours worked. This indicator, of course, has to be used more frequently in the monthly series, as the collection of current data is necessarily limited to the more important series. But even at annual intervals, labour input series represent the only approach to a measure of output for such industries as furniture, machinery, automobile parts, the products of which are so numerous and heterogeneous that they cannot be classified and compiled in significant physical units of measurement. One advantage of labour series is that they relate fairly closely to actual work done. The main disadvantage is that they do



not reflect any changes in output per man-hour, or the so-called "labour productivity". The problem is further complicated in that it is not possible to measure directly changes in productivity without the very data on physical output which necessitated the use of man-hours in the first place. A tentative solution is to apply to unadjusted man-hour series productivity changes in allied industries where information exists to calculate such changes. In the present revision of the index this was not attempted. Census of Industry data were used in the construction of the benchmark data up to 1947. This period covers the war years and the immediate postwar years. Industrial designs and manufacturing processes were altered greatly to meet the needs and specifications of the armed forces, and, subsequently many industries were affected by the problems of conversion to peace-time production. In addition, the economic forces which normally affect the supply and demand for labour were disrupted during the war: fear of labour shortages in vital defence industries often led to hoarding practices with the result that while some areas of production were desperately short of manpower, others actually enjoyed a surplus for short periods. These conditions and disturbances led to sharp variations in productivity and it was precisely in those heavy processing industries most affected by war requirements that the use of man-hour data was concentrated. To assume, for example, that output per man-hour changes in primary iron and steel or iron castings could be applied to the industries mainly occupied in turning out guns or machining shells did not appear reasonable in view of the fact that while the organization of the former industries was not seriously affected, the latter were obliged to alter greatly their processes and lay-outs. In addition many new firms entered the field, thus further disrupting the relationship between labour input and output. It was decided that more accurate results would be obtained during this period if each of these industries were analyzed separately. In a number of cases, such as in aircraft and shipbuilding, it was possible to compute rough labour input-output relationships from production and man-hour data for those firms which fabricated standardized units in quantity and to apply these ratios to the man-hour figures of the other establishments in the same industry. Where assumptions as to these relationships did not appear feasible or where there was insufficient data to construct productivity ratios, man-hours were used without adjustment. In some industries the levels so obtained agreed roughly with other series such as low-coverage product or material aggregates, and this imparted a certain degree of confidence to the man-hour indicator. In any case the industries so treated account for a relatively minor proportion of total industrial production and it is felt that the lack of adjustment for productivity changes in these industries does not seriously affect the level or the movement of the overall annual index.

Now that industrial plants have been more or less converted to normal peace-time activities, assumptions as to similarity of productivity move-

ments in allied industries have become more valid, and it is intended, in further revisions of the index for the postwar period, to consider applying these adjustments more freely. In the monthly series, of course, unadjusted man-hours are used to represent "work done" in a greater number of industries. For a large proportion of these industries, however, revised benchmarks, based on census quantity data, are available at annual intervals and the corresponding monthly indexes will consequently not run too long without revision for changes in relationship between man-hours and volume of output. In these circumstances, providing a not too great proportion of the index is based on man-hour data, the use of the latter to indicate changes in net output is justifiable and should not result in any serious discrepancies.

#### (e) Values Adjusted for Price Changes

Another type of indicator is value of output or materials adjusted for price changes. It is used almost exclusively in constructing benchmark indexes, as current data are usually collected only in physical volume form. Basically such series have the same limitations as final products series. One advantage, of course, is that when derived from censuses of production they represent full coverage of individual industries. As they are mostly used in cases where quantum data on products and materials are lacking, the main difficulty is in obtaining suitable price indexes for deflation. Most price indexes are of the Laspeyres base-weighted variety, relate to commodities and not individual industries, and, if computed at the wholesale or retail level, reflect variations in mark-up. Because of these limitations, as considered in relation to the construction of volume series, published price indexes were used very sparingly. In most cases where the deflation procedure was utilized, special unit value indexes were constructed from census data either by using unit values of some firms in the industry concerned or by obtaining price data for the same commodities from other industries.

In the new index "net" volume of output indicators represent industries which account for over 49 per cent of total manufacturing value added in the weight-base period 1935-1939. Volume of gross output or final products series account for more than 24 per cent, volume of materials consumed series 5 per cent and deflated value of materials indicators 6 per cent. Thus, only 16 per cent of manufacturing value added in the annual benchmark indexes is represented by man-hours. It should be noted that some of the man-hour indexes were adjusted for estimated changes in productivity while for others it appeared, from supporting evidence, that no significant changes occurred. It is generally agreed that output per man-hour in manufacturing rose to some extent during the period covered by the index. If it is assumed that productivity in those industries represented by unadjusted man-hours rose proportionately, then the overall index is biased moderately downwards. However, it has been established that base-weighted Laspeyres-type production indexes have a certain upward bias,



and so it can be reasonably concluded that the pull in opposite directions will tend to cancel out some of this discrepancy.

## Detailed Description of Methods — Annual Indexes

### (a) Tabulation

Practically all of the data used in the construction of the annual indexes from 1935 to 1947 was obtained from Census of Industry files. The first step was the tabulation, for each year of the period covered, of the quantities and value of the products, materials, and fuel and electricity, and of wage-earners, hours worked and wages paid in each individual census industry. In other words, all available information that could be of help in determining as accurately as possible the levels of output for each industry was transcribed onto work sheets preparatory to analysis and computation. Census values of production exclude indirect taxes and subsidies but include cost of containers when these are not returnable. Census statistics do not include goods bought for resale without further manufacture. Before the work sheets were handed out for computation, the tabulated material was given a preliminary examination in order to discard any visibly-defective items or items which lacked continuity or had been affected by changes in classification. It was at this stage that it was possible to indicate where changes in the weight-base within certain industries would materially improve the coverage and accuracy of the indexes.

### (b) Computation

The next step was the actual computational work. The total value for each item during the five-year base period (1935-1939) or in any subsequent year chosen as a weight base, was divided by the total corresponding quantity, giving an average unit value for the base. The quantity in each year of the period covered by the index was multiplied by this fixed unit value. After each item in the industry had been treated in this way, a sum was taken, for each year, of the values at constant prices. At the same time, the values at current prices of the same items were also summed. The division of the latter figure by the total current value of the industry in each year gave the percentage of coverage. The sum of the values at constant prices of the covered items was then divided by this coverage ratio. As explained in a preceding section this has the same effect as dividing the total current value of the industry by a Paasche-type unit value index based on represented items. The resulting "blown up" aggregate in each year was then divided by the average aggregate in the base period to yield the physical volume index. This procedure was applied to the products, materials and fuel and electricity of the industries for which these factors were available.

### (c) Analysis

Having assembled the above-mentioned data, the computers of the index were in a good position to proceed with the analysis. Priority was given

to the preparation of a volume aggregate of net output for as many industries as possible. The information on production and materials was subjected to a thorough examination as to consistency and comparability. The analysis was facilitated by having the results displayed over a thirteen-year period. Marked discrepancies between the movements of products and materials raised questions as to whether the differences could be explained by valid reasons. In many cases this meant referring back to the original returns of individual firms to check the accuracy and consistency of the data reported. During this phase of the work, Bureau experts in various industries and some officials in outside departments were often consulted. Their knowledge of the history and background of the industries and firms, of changes in methods of manufacture and of the reliability of the information collected, helped greatly in deciding on the best line of approach.

The number of wage-earners employed was available on an annual basis for each of the industries included in the census reports. An estimate of man-hours was also obtained by dividing the total wage-bill in each industry by average hourly earnings derived from hours and earnings data recorded by the Census of Industry, for a week in the month of highest employment during the period 1935-1945 and from monthly returns on hours and earnings collected by the Employment Section of the Bureau since 1945. Any wide gap, which reasonably could not be attributed to changes in productivity, between the number of wage-earners or man-hours worked and preliminary output data directed attention to possible discrepancy requiring close scrutiny and adjustment. The conversion of the data to index form and the plotting of the results was valuable in this connection.

Satisfactory, data on the volume of products, materials and fuel and electricity were obtained for 56 manufacturing industries representing 49 per cent of the total census net value of manufactures in 1935-1939. The sum of the volume aggregates for materials and fuel and electricity was deducted from the volume aggregate of the products in each of the 56 industries to give a "net" volume aggregate at constant prices which was then indexed on the base 1935-1939.

Where the data on either materials or products were found defective or insufficient, it was not possible, of course, to construct "net output" series. In 59 industries the volume of "gross" output or final products was used to represent the quantum of "work done". These industries accounted for 24 per cent of manufacturing value added in the base period. In another 13 industries, representing over 10 per cent of total net value, the volume of materials consumed was used as an indicator, while for the remaining 34 industries which accounted for 16 per cent of manufacturing "value added", man-hours were the only means available of measuring the volume of output. Throughout the analysis of these alternative series, the concept of "net output" was kept in mind, and in a few



cases, where it was apparent from an examination of the data that changes in the amount of "processing" would seriously affect the levels of the index, adjustments were made to bring the results more in line with the desired measurement.

## (d) Problems

### 1. Discontinuity

The construction of an index for the war period bristled with difficulties, and the reconversion years presented problems of their own. War production was superimposed upon the industrial economy normally devoted to the meeting of civilian needs. Readjustment and expansion characterized many industries and the output of many civilian items was sharply curtailed or cancelled altogether. The pattern of durable goods production especially was disrupted; the automobile industry was converted to the manufacture of military trucks, tanks, armoured cars, etc.; the railroad and rolling stock equipment industry added the output of guns and heavy ammunition to its normal activities; the electrical apparatus industry substituted the manufacture of military radio and electronics equipment for that of civilian radios and appliances; the brass and copper industry allocated a considerable portion of its resources to the fabrication of cartridge cases; the aircraft, shipbuilding and ammunition industries attained tremendous levels of production. The output of many other industries was altered to meet the needs and specifications of the armed forces. In non-durable manufactures, the rubber, footwear and clothing industries were also affected by the requirements of the military.

Of the many problems confronting the computers of the index, the most common was that of breaks in the continuity of production series where war contracts led to marked change in the nature of output. The only feasible solution was to use the linking process whereby the base period of a particular industry was changed in order to take account of the new products. Thus in the explosives and ammunition industry, the 1935-39 base period was used in the computation until 1941. For the period 1941-1946, the year 1943, when the unit values of all the various cartridges, shells, charges, fuses, etc., were in appropriate relationship, was adopted as the base, and the data were computed backward and forward from that base. The resulting aggregate was then expressed as an index on 1941=100 and transferred in that year to the 1935-39 base period. For 1946 and subsequent years, when the nature of the industry's output more or less reverted to the prewar pattern, the items of production were again weighted directly with 1935-39 unit values and the 1946 level was remarkably close to that resulting from the use of 1943 weights. In other industries where this method was applied, similar results were obtained, and the computers were thus reasonably certain that the technique involved no serious distortion.

In some cases, such as in the agricultural implements industry, armament production so disrupted

the pattern of output and the new commodities were so heterogeneous in nature, that the coverage of represented items was insufficient to continue the use of the products series throughout the war period. Man-hours were substituted during these years. The direct measurement of quantitative output was resumed in 1946 and the difference in level in that year between the index based on man-hours and that based on production was pro-rated backwards to the year of the original change in series.

Whenever examination of the data revealed that by inserting the data on new products into the computation or by taking advantage of the introduction of finer breakdowns of commodities in census returns, the accuracy of individual industry indexes could be enhanced, the change of base and subsequent linking processes were adopted. Thus the overall index reflects to a certain extent the influence of more recent weighting patterns at the commodity level. Any statistical distortion that may result from this procedure is counter-balanced by the greater accuracy arising from the increased coverage and the improved homogeneity of the commodities involved.

### 2. Net Output

Special problems arose in connection with the measurement of the volume of net output. Care had to be taken to ensure that no inconsistencies originating in the reporting and tabulating of the basic data influenced the levels or movements of the series. Especially in industries where materials consumption represent a large proportion of the value of finished products was a careful analysis of the data important. In such cases, even small discrepancies in the aggregates of either products, materials or fuel which would have little effect on the levels of the individual aggregates, have a considerable influence on the "net" residue. In several instances, the original establishment returns had to be examined and revised where it was apparent that the data had been erroneously reported.

A word should be added here on the procedure adopted for the measurement of the volume of materials used. The Census of Industry usually classifies materials as specified ingredients, containers and wrapping materials, and all other materials including process supplies. In most cases, no quantities are reported for containers and wrapping materials, and as these constituted an important share of the total value in some industries, their influence had to be taken into account in the measurement of net output. In the absence of any data on the component parts of this classification, its volume was presumed to have moved with the production of the visible supply of goods, that is, gross output, and its derived aggregate was added as such to that of the other materials. Admittedly, shifts in the content of production may bring about corresponding changes in the types and quantities of containers and wrapping materials used. Fortunately, for those industries in which the cost of these materials was a large factor, proportionate changes in types of products were relatively slight.



However, the volume of net output does not reflect any possible variations in the ratio of containers and wrapping materials to products manufactured.

A further problem arises when changes in the nature or quantity of raw materials are not reflected in the measurement of the resulting products. This difficulty is tied in with that of quality and insufficient detail in the tabulation of manufactured commodities. It is conceivable that some changes in quality could be reflected in the volume of materials but not in the volume of output. For instance, plastics are displacing wood and other conventional materials in the manufacture of a growing number of commodities. While this change will affect the level of the volume of materials, no compensating factor will be recorded in the measurement of the products, unless an additional breakdown of commodities by types of materials used in their fabrication is available in census returns. This often is not practicable. In industries where discrepancies of this sort arose, net output computations were not attempted. Similarly, in industries where war conditions caused temporary changes in the nature or source of raw materials, the standard procedure in the computation of net indexes was not followed, and either alternative techniques were developed or measurements were based on products only.

### 3. War Production

In the construction of volume indicators, during the war years, for such industries as motor vehicles, aircraft, shipbuilding and explosives and ammunition, extensive use was made of delivery data compiled by the Department of Munitions and Supply. Census materials data were inadequate for the computation of a net volume index and the production statistics were not shown in as detailed a breakdown as those of Munitions and Supply. Contract unit values for each different specification in 1944 were utilized as weights and census figures on the value of work in process were used to adjust the aggregates. The year 1944 was chosen as the base in these instances because it was not until then that the definite cost of each military item was finalized and that unit values were in proper relationship. In the shipbuilding and aircraft industries each type of ship and plane was weighted separately. Once the developmental and tooling-up stages had been completed, these instruments of war were being produced in ever-increasing quantities and it became possible to treat them statistically as standardized commodities during the war period. To have used unadjusted man-hours during those years to represent the volume of output would have seriously understated the levels of production, as output per man-hour rose tremendously in these mushrooming industries once the labour force was engaged in mass production. Because of the difficulty of estimating and linking volume changes in the building-up and reconversion stages and of adjusting for volume changes in work in process and repairs and in the fabrication of component parts, the levels of physical output for these indus-

tries must be considered only approximate, although the results, after analysis, seemed reasonable to the computers.

### 4. Mineral Production

In the mining sector, due to lack of data on materials consumed, no indexes of "net" output were constructed. In the metals section, "work done" was defined as the "metal content" of the ore treated or exported. The coverage was practically 100 percent in all sectors of the industry.<sup>1</sup> For statistical purposes all metals were considered as one industry, as the problem of tabulating separate production data for each type of metal-mining operation was too involved. A large amount of inter-plant transfers further complicated the situation. Operations in the fuel, non-metal and quarrying divisions of the industry were more homogeneous and each sub-industry was assigned a "value added" weight. The natural gas industry deserved special consideration. Most of the gas is extracted from wells in Ontario and Alberta. In the latter province the wells are operated in conjunction with the oil wells and the gas is considered somewhat as a secondary product. In Ontario, wells are dug and operated solely for the purpose of extracting the gas which is then piped to the industrial region. It is immediately apparent that, though the product mined in both provinces is identical in nature, its extraction involves a relatively greater outlay of funds in Ontario than in Alberta and, because of an abundant supply, its unit selling price in the latter is considerably lower. A complicating factor is that production of natural gas cannot be separated, in practice, from distribution so that the value added of the industry includes the cost of piping the gas to consumers. For purposes of weighting, unit values at the well-head in each province were estimated. The proportion of Ontario gas in the base period 1935-1939 was much higher than in more recent years as the rapid development of oil resources in the Prairie Provinces was accompanied by a considerable rise in natural gas output. If production in both provinces had been combined and the single figure used to measure the volume of output, this would have resulted in overweighting the gas component of the index in recent years. It was consequently decided to weight the production in each province separately whereby Alberta gas was assigned a lower unit value than Ontario gas. The resulting aggregate was more representative of the relative importance of the industry throughout the period covered by the index.

### (e) Conclusion

The annual benchmark indexes from 1935 to 1947 are considered final in the sense that no further revisions of individual industry indexes are contemplated. The computers were fortunate in having access to unpublished material and to the returns of individual establishments; this no doubt contributed to more accurate results, as in many cases published information was either too

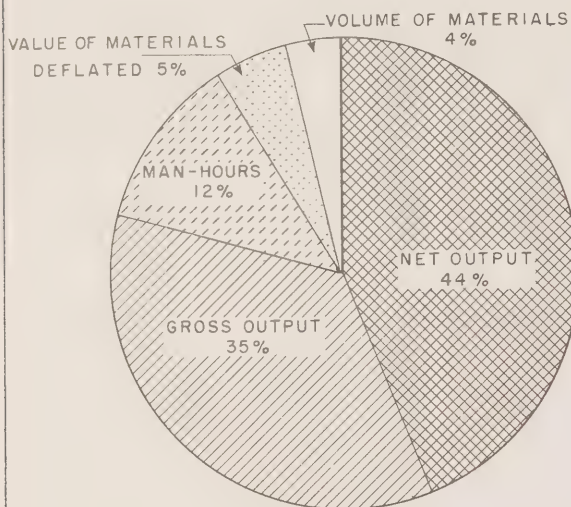
1. The total index of mineral output includes all metals and minerals produced in Canada with the exception of those obtained from pitchblende ores, the information on which is strictly confidential.



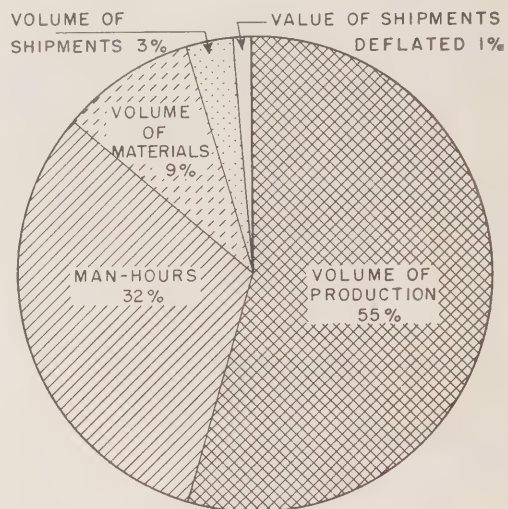
# TYPES OF INDICATORS SHOWING PERCENTAGE OF VALUE ADDED REPRESENTED IN 1935-1939

## INDEX OF INDUSTRIAL PRODUCTION

### BENCHMARK INDEXES

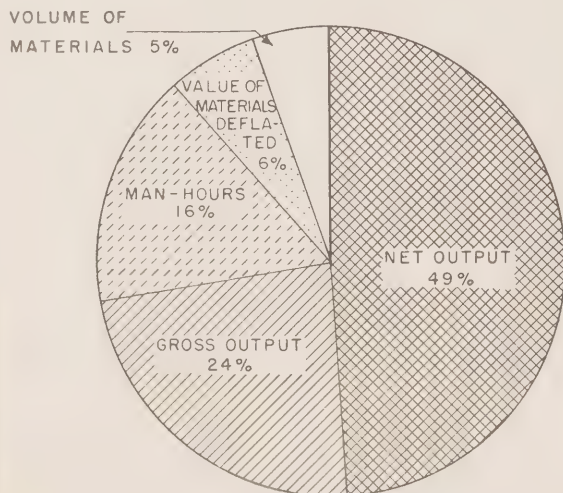


### MONTHLY INDEX, 1952

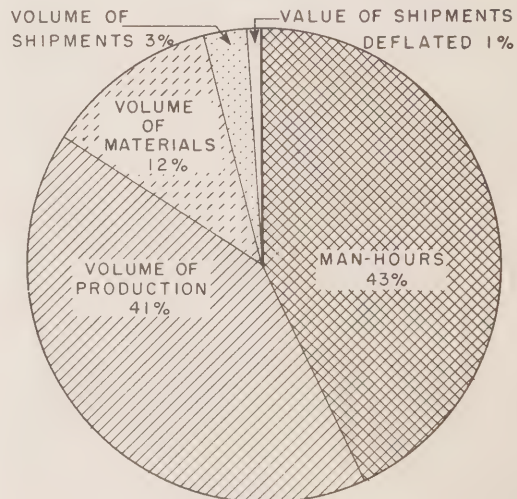


## INDEX OF MANUFACTURING PRODUCTION

### BENCHMARK INDEXES



### MONTHLY INDEX, 1952



general or supplied insufficient coverage. In addition the availability of this data permitted the tracking down of inconsistencies as between different series representing the same industry. For the period subsequent to 1947, the indexes are based on monthly series of production, shipments, materials used, or man-hours worked and their construction is discussed in the following section. As census of industry data become available for these years, the annual levels will be reconstructed and will serve as benchmarks to which the current series will be adjusted as during the earlier period. In this way, it is not expected that the indexes will run for more than two years without revision.

## Detailed Description of Methods — Monthly Indexes

### (a) Source of Data

The tracing of monthly fluctuations during the seventeen years was also a major undertaking. The scope of the monthly collection of data by the Bureau was greatly extended during the war and post-war years. Trade associations have been co-operative notably in connection with the current statistics of textiles and of pulp and paper. During the last war the statistical work of government agencies was greatly expanded. The operations of the "Munitions and Supply" Department and the "Wartime Prices and Trade Board" called for definite information as to monthly production in many lines. A considerable portion of the results was taken over by the Bureau and the collection continued. Statistics assembled by other government departments such as Agriculture, National Revenue and Defence Production made possible the use of actual production data to represent the meat products, tobacco and beverages and metal smelting and refining industries.

Although the number of manufacturing industries represented by quantitative monthly data has been considerably increased in recent years, the coverage is still well below that obtained in the annual computation. In the manufacturing sector of the index, the industries represented by actual physical volume data on either products or materials account, at present, for about 56 per cent of total manufacturing value added in the base period. The remaining industries are mainly represented by man-hours worked, collected since 1945 by the Employment Section of the Bureau from firms employing 15 or more workers.

### (b) Measurement: 1935-1947

The work of constructing the monthly indexes was divided into two stages. The first stage consisted of filling the gaps between the annual benchmark series for the period 1935-1947, and the second stage was the extension of these indexes by means of available monthly data to the present time.

The first step in the work covering the period prior to 1947 was the tabulation, by months, of existing volume data on production, shipments or

materials. The series were compared with the corresponding annual census totals and any anomalies corrected. Agreement with the annual in the majority of cases was close enough to dispense with the need for adjustment. The data were then adjusted for calendar variation and indexed. For industries represented by more than one series, the average of relatives formula was used whereby each individual series is assigned a percentage weight according to its relative importance in the industry as measured in most cases by census selling value in the case of products or by census cost value in the case of materials. The coverage, within industries, in general, is necessarily lower in the monthly series than in the annual and the weight of unrepresented items is imputed to the represented items by allocating pro-rata to the latter the total weight of the industry. It was thus assumed that the volume of unrepresented commodities moved the same as the volume of represented commodities. In most industries representation was adequate enough to justify this assumption. In two industries, namely dairy products and flour and feed milling, approximate value added weights were obtained for each item of output by identifying the materials consumed in the production process and subtracting their value from the selling value of the products. By this procedure the averages of the monthly series agreed more closely with the "net" volume benchmark indexes. It is especially important to establish a proper weighting pattern for industries of this type in which the ratio of value of materials to value of products is high and any change in the composition of production has a marked effect on the levels of the indexes.

In the case of industries for which there existed no monthly production or materials data during this period, it was necessary to use employment data to establish the monthly fluctuations between benchmarks. For all census industries, the number of wage-earners employed on the fifteenth of each month was available and as, generally speaking, changes in output per wage-earner are slight over a short period, these data were used to fill the gaps in quantum statistics. Monthly indexes were not computed for all industries during the period under consideration, and in many cases, especially where employment data were used, monthly series were limited to main groups and the more important sub-groups.

### (c) Adjustment to Annual Data

The next step was the adjustment of the monthly indexes to the annual series. Where "net" annual indexes were available, these were used as the benchmarks. No monthly "gross" indexes were constructed in these cases; their use on an annual basis was only for comparison and analysis. Where no annual "net" indexes could be constructed, however, the alternate annual series were used as abutments. Although year-to-year discrepancies between the annual indexes and the monthly averages were not, in general, too serious, the accumulation of these differences often reached



considerable proportions over the longer term. Almost invariably the monthly indexes showed lower levels than the annual, the degree of bias being more pronounced in industries showing diverging trends of gross and net output and in those represented by monthly employment data. If a fixed ratio, based on the relation of the benchmark figure to the average of the monthly figures is applied to each monthly figure, the monthly average will then correspond to the benchmark level, but discontinuity often arises between each December and the following January figures, depending on variations of the rate of change between the annual index and the monthly average. This discrepancy was especially serious in certain war industries where changes in output per wage-earner were considerable. In order to minimize this discontinuity the following method was adopted: After the fixed ratio had been applied to the original data, tests were made to determine the years in which smoothing was necessary. The adjusted June figures for each pair of years requiring adjustment were used as abutments. The difference between the ratios of the adjusted to the original figure for successive Junes was then assigned progressively to the intervening months and multiplied in each case by the original monthly figures. The adjusted figures for each calendar year were then readjusted to the annual benchmarks to correct for the usually small discrepancies. While this procedure is rather crude and did not always remove discontinuity completely, it nonetheless resulted in more reasonable trends, although the magnitude of the month-to-month movements of the adjusted series did not always correspond with those of the original monthly data.

#### (d) Measurement: 1947-

A greater amount of current data was available for the measurement of monthly fluctuations in the postwar period. More care had to be exercised in the choice and analysis of representative series than had hitherto been necessary as, in the majority of cases, the last benchmark index was for 1947. The main consideration in the choice of indicators was their ability to approach the volume movements of their respective industries as indicated by census data. Where doubt existed as to the appropriateness of monthly series, preliminary annual indexes were prepared from census material from 1947 to 1949 or 1950. Thus the averages of the monthly series could be tested during these years against the more comprehensive annual data. Absolute agreement, of course, was not usually obtained, but divergence within a few percentage points is considered accurate enough for current indexes. If, because of insufficient coverage or other deficiencies, the monthly series were not adequately representative, they were either discarded and their weight assigned to related series, or other types of data, such as man-hours, were substituted. Imputation of weights, however, was avoided as much as possible. In the old index the procedure was often adopted whereby the weight of an industry for which no data were available was assigned to that of an allied industry

with the assumption that the volume series used to represent the latter was also applicable to the other. Unless the industries concerned are very closely related and are governed by the same market conditions or that the entire production of one constitutes the principal material of the other, the results are often subject to error. As more detailed classifications of industries became available from man-hour compilations, it was possible to represent some of the industries the weights of which had been hitherto assigned to others with man-hour data.

Some monthly series presented a problem in classification. Current data on production or shipments almost invariably refer to commodities and not to industries. If a commodity is wholly produced within an industry, no difficulty arises. But in a few cases commodities cross industrial lines with the result that a considerable proportion of the output of certain items is manufactured in industries other than those to which the major share of production is classified. An example is the monthly series on the output of iron castings. Many firms classified to industries other than "Iron Castings" produce castings for their own use. These are included in the monthly compilation but are not included in the census industry from which the annual index is computed. It was deemed advisable, in cases where the movement of an "industrial" index could be seriously affected by varying production levels of firms, classified to different industries, to subtract the output of those firms from the total recorded. Where only a minor proportion of output was involved the series was used, as reported.

For those series which were collected on a monthly basis for the first time in recent years and which comprise commodities for which no comparable classifications existed in the base period, the weighting system within the industries they represent was based on a post-war year. The index for the industry was constructed on the latter equalling 100 and linked onto the last available benchmark expressed in terms of 1935-39=100.

#### (e) Use of Man-hour Data

Where man-hours were used to represent output, the computation of "gross" annual levels from Census data was extended to 1949 and even to 1950 when census material was available. There was not time to subject the work to as thorough an analysis as for the 1935-1947 period; moreover the main purpose was to correct for major changes in the ratio of output to man-hours whereby the series would not have to run too long without adjustment. Once final indexes for all industries for the period 1947-1950 have been constructed from census data, more attention will be given to post-war productivity trends and the possibility of applying current output per man-hour factors to the monthly series of hours worked. Until more knowledge of these trends is obtained, however, the indexes of industries represented by man-hours will run for one or two years before productivity adjustments are incorporated into the series. Depending on the industry, it re-



quires about this length of time before census results are compiled and volume series constructed.

The monthly man-hour statistics collected by the Employment Section of the Bureau refer to establishments employing 15 or more persons. It is assumed, therefore, that the number of hours worked in plants employing less than 15 persons will follow the same trend as in the larger firms. For the majority of industries the coverage is adequate, but for those where the number of small establishments comprise a considerable proportion of the total number of operators, the assumption is dubious. Failing the feasibility of imputing the weight of these industries to related series or of obtaining any alternate indicator of output, the man-hour figures had to be used as reported. Fortunately the use of man-hours in the monthly index is mostly concentrated in those industries where the bulk of production is accounted for by firms employing more than 15 persons.

The current hours data collected by the Bureau relate to hourly-rated wage-earners and cover the pay period ending nearest to the last day in each month. For the majority of establishments the pay period consists of one week. If these figures were to be used as reported to indicate productive activity, it would have to be assumed that the hours worked during the last week of the month were representative of the hours worked during the whole month. For purposes of the index it would have been preferable to have the data relate to the pay period ending nearest the 15th of the month. Failing this, the figures are subjected to a two months' moving average whereby the man-hours worked in the last week of two successive months are added and averaged arithmetically. This procedure has the effect of smoothing the monthly trend and of being more indicative of work done throughout the month. The use of man-hours is confined to the manufacturing sector. The mining and the electricity and gas divisions of the index are well covered with monthly volume of production data.

#### (f) Adjustment for Working Days

The Statistical Office of the United Nations recommended that the primary index of production should be constructed on the basis of production per working week. The flow of production month by month is affected by the inconsistencies of the calendar. Production in February tends to be lower than in any other month owing to the lesser number of working days. The number of Saturdays and Sundays varies from month to month thus affecting the length of the work month. Good Friday may be observed in March of one year and in April the next, disrupting the comparisons. The number of days worked per week differs from industry to industry, four classes being distinguished. A group of industries is known to operate five days per week, others may work five and one-half days or six days and the fourth group from the nature of the process is forced to operate seven days. By maintaining a shift system, the number of hours worked per employee

may be more uniform but the essential fact is that the establishments are kept in operation for the indicated days per week.

Through a study of the researches of the Labour Department, furnished directly or as published in the Labour Gazette, supplemented by examination of the statistics of man-hours worked according to the annual census, considerable data were assembled as to the practice in different industries. By an examination of the calendars for the years from 1935 a schedule was drawn up as to the number of days worked in each month. Four sets were prepared according to the number of days worked per week. The results were placed on a percentage basis, the sum of the index numbers for any year averaging 100. The volume data compiled to measure the monthly fluctuations were then divided by the appropriate calendar variation indexes. No adjustment of employment or man-hour series was necessary, as the number of wage-earners was reported as of the fifteenth of the month and the man-hour data were based on the last pay period of the month, both series therefore not being subject to variations as to the number of days worked. Holidays, with the exception of Good Friday are considered to be a seasonal influence and are not taken into account in this adjustment.

The decision not to adjust the monthly index for seasonal variations was based on two main considerations. Many of the series which are influenced by significant seasonal factors such as fish canning, carbonated beverages, breweries, sawmills, etc., did not become available on a monthly basis until after the war, thus affording but a short period on which to base an index of seasonal behaviour. The seasonal patterns of other series which cover longer periods, such as motor vehicles, were considerably disrupted after the end of the war. In addition, the extra work involved in compilation and analysis would have seriously delayed publication of the new index. It was thus decided to postpone the introduction of new seasonal adjustments until more research was possible.

#### (g) Publication

For the period subsequent to 1947, annual levels obtained by averaging the monthly indexes must be considered provisional until further benchmarks are constructed from census data. Meanwhile, the publication of the monthly index will follow a predetermined pattern. The recommendation of the Statistical Office is to publish the monthly index on a provisional basis. Apart from the preliminary nature of the data used to compute current series, the main reason for this policy is that many series are not available in time for inclusion in the index. It is thus preferable to publish promptly a reasonably accurate index than to wait too long for final figures.

At the present time, it is not possible to construct the Canadian provisional monthly index sooner than six weeks after the end of the month to which the data relate. For instance, the preliminary December index will not be ready for publi-



cation before February 15th, and the data for several industries will still be missing. However, if some important series are missing and if there is reason to suspect that their movement is different from the series included or that their level has changed significantly from that of the previous month, an estimate of the current month levels will be made. It is better to obtain a rough approximation for these series from an analysis of recent trends or of seasonal behaviour than to leave them out of the provisional calculation. The use of man-hours raises a problem in this connection. The figures for the last week of the month become available one month later than the bulk of the series for which volume data are used. It will thus be necessary, in order to have the index ready within six weeks after the end of each month, to use the man-hour figures which refer to the pay period ending nearest the last day of the month as an indication of activity during the following month. The figures related to industries subject to marked seasonal variation or which are affected by extraordinary influences such as strikes will, of course, have to be adjusted.

#### (h) Future Revisions

As it is not possible to compute, on a monthly basis, an index of "net output", the last available "net" benchmark indexes are extended by means of the current "gross" series. It is thus assumed that variations between net and gross output are nil or negligible. Over a short period, as revealed by the movement of the annual indexes, the assumption is safe enough, especially in connection with month-to-month variations. The annual levels for the current period obtained by averaging the monthly indexes will be revised as industrial census data become available. It is not intended, however, to change the monthly indexes every time more current benchmarks are constructed except where serious discrepancies have occurred. The current series will be overhauled at longer intervals depending on the availability of additional data and on the degree of divergence from the benchmark series.

#### (i) Newfoundland Data

The entry of Newfoundland into Confederation in 1949, and the subsequent inclusion of data on its output with those of the other provinces resulted in minor discontinuity of Canadian production series, especially for iron ore, base metals, pulp, newsprint and fish processing. As the data for the tenth province appeared in the statistics, the series including Newfoundland were linked to those excluding Newfoundland in the month of overlap, so that in subsequent months the indexes reflect variations in total Canadian output including that of Newfoundland. In the month of overlap, however, the introduction of Newfoundland data did not influence the levels of the indexes in that month.<sup>1</sup>

#### Comparison with the Present Index

In 1951, the new index averaged 6.6<sup>8</sup> per cent higher than the index presently published. Most of the gap between the two series occurred in 1941

when war production was increasing rapidly; it was concentrated mainly in the durable manufactures sector. The availability of supplementary statistical records from the former Department of Munitions and Supply made possible more accurate measurement of industries engaged in war output.

After 1941, the year-to-year percentage changes of the composite new index are generally similar to those of its predecessor. In some industries the gap between the two series is wider than in others. The new indexes for Mining and Electricity and Gas are both slightly below the indexes now in use, whereas the new Manufacturing series is somewhat higher. With the exception of Rubber Products, Leather Products, Transportation Equipment and Non-ferrous Metals, the new manufacturing component indexes are higher in the latter part of the period covered. In the case of Foods and Beverages, Tobacco and Products, Rubber Products, and Paper Products, a large portion of the discrepancy is accounted for by the application of the "net output" concept to the data used in the revised index. In Petroleum and Coal Products and in Chemicals, changes in classification disrupt comparability to some extent. The use of "coverage adjustment" factors in the construction of the benchmarks for the new index also resulted in some modification in the levels as compared with those of the present index which is based on the movement of represented products only. In addition, the fact that many industries in the present index have been represented by unadjusted man-hours since 1945 has resulted in some bias. Many of the series represented by man-hours or other alternate data in the revised index have been adjusted to annual census levels up to 1949 or 1950.

#### Appraisal of Results

The new Index of Industrial Production herewith presented is undoubtedly a better measure of the volume of output than its predecessor. The application of the concept of "net" output, the use of comprehensive Census of Industry material, the application of "coverage adjustment" factors, the careful examination and analysis of the data, and, in the current index, the availability of additional monthly series, all contributed to a decided improvement. Unfortunately, the Bureau knows of no method of determining the absolute accuracy of the index. A measurement was obtained for each individual industry and no doubt the results were truer for some than for others, the margin of error depending on the quantity and quality of the data available. It is probable that errors did occur but it is also probable that they occurred in both directions thereby offsetting each other to some extent. The composite index, therefore, can be assumed to be more reliable than any of its major components and these, in turn, more reliable than the indexes of the industries they comprise.

In the analysis of the data the judgment of individuals entered at several points. For many industries, a choice of several indicators was available, and the decision as to the most appro-

1. The inclusion of Newfoundland data for 1949 would raise the index of Industrial Production for that year by about one per cent.



prate series was taken only after a careful examination of the data. The advice of Bureau specialists in different industries and the placing of individual plant census returns at the disposal of the index analysts, no doubt contributed markedly to the increased accuracy of the results. Users of the index must consider its accuracy in relation to the purpose for which the data are wanted. They must take into account the definition of output and the statistical formula employed, the nature of the data used in some industries and changes in census classification which occurred during the period covered. If the index is related to other series special care must be taken to consider the appropriateness of the comparison. As employment data are used frequently in this connection, considerations which must be kept in mind are the subject of a later section.

As regards the monthly index, the major source of error lies in the lack of actual volume of production data for many industries and the necessity of using inferior series as substitutes. For this reason, until marked improvement in current coverage is obtained, the indexes must be considered as being only approximate. In the meantime efforts will be continued to improve the monthly collection of volume data and to subject existing material to further analysis with the object of obtaining series which will reflect more accurately monthly trends in the volume of output.

### Future Projects

The work of extending benchmark indexes to later years is already under way. As census data for most industries is now available up to 1950, the project will cover the period 1947-1950, using the year 1949 as a base. The computations on the new base will also be applied to 1946 in order to determine whether the change of weights will affect the movement of the index between 1946 and 1947. At the same time, the construction of new annual indexes for the period 1919-1934 will be undertaken. The data has already been tabulated but the computation and analysis remain to be done.

A programme is under way at the Bureau designed to improve and extend physical volume estimates from the National Accounts through the deflation of value series for the various sectors of Gross National Expenditure. A deflated series has been published for the period 1926-1950. Alternatively, an estimate of aggregate production can be obtained by combining physical volume indexes for each industrial component of Gross National Product at factor cost. An experimental project using the latter approach was carried out in the Research Department of the Bank of Canada and is now being placed on a continuing basis at the Bureau of Statistics. The present revision of the mining, manufacturing and electricity and gas sectors is the first step in the broader programme, and the work will be extended to the other sectors of the economy, using, as much as possible, the

direct technique employed for the Index of Industrial Production. Although there are some conceptual differences involved between the deflation and direct quantum procedures, the two approaches can be reconciled and used as a check on each other. A composite measure of the volume of production for the whole economy is probably the most useful single statistic, and every effort will be made to obtain the most accurate measurement possible.

### Relation to Employment Data

As production indexes are often used in conjunction with employment or man-hour series to indicate changes in productivity, it is important that the significance of such comparisons be analyzed and made known to users of the data.

The term "productivity" is commonly used to indicate the relative efficiency of production, whether it be for a firm, an industry, a group of industries, or the economy as a whole. It is a rate of production, not the absolute volume, and is usually expressed as output per man-hour; that is, the total output divided by the total number of man-hours required to produce that output. It is this measurement that is widely known as "labour productivity". It must be made quite clear that this is a statistical measurement, and carries with it no implication that labour is solely responsible for either gains or losses in production. Productivity can also be expressed in terms of output per dollar of capital, per hour of machine operation or per unit of energy consumed. It reflects the efficiency of the whole productive process, not that of any one input factor.

Actually, increases in productivity can be traced to a large number of factors. Technological progress, mass-production techniques, managerial ability, specialization of labour, improved working conditions, all of these factors and many others contribute to higher productivity. The gains of productivity, then, are the result of a joint effort, and it is difficult to isolate the exact contribution of each factor.

In calculating productivity, the most common procedure is to divide an index of production by a corresponding employment or man-hour index. If both production and labour series are satisfactorily constructed the resulting index of output per man or per man-hour will have some significance, but it must be remembered that small errors in either of the two series may be compounded, with the possible result that the error in the productivity index may be greater than the actual changes in productivity, since the latter usually fluctuates within very narrow limits.

When production indexes are used in this connection, careful consideration must be given to the statistical methods used in constructing the indexes and to the types of indicators selected to represent production before any significance can be derived from the ensuing productivity measure.



A certain amount of circularity would result, for instance, if several industries in the production component were represented by man-hours as it would then be assumed that output per man-hour in those industries remained constant. It will be recalled, also, that when the volume of materials consumed is used to represent production, no account is taken of possible changes in the amount of processing; if it so happened that certain firms within an industry integrated their production process whereby materials were purchased at an earlier stage of transformation, the index of materials would develop a downward bias as an indicator of production but the man-hour series for those firms would reflect the added work-content of the products manufactured. The resulting productivity index could thus possibly show a decline whereas actually there occurred no change or even an increase.

The use of these alternative series to represent production, while tolerated in the construction of output indexes covering a relatively short period, can result in considerable distortion when they are included in the production component of a productivity ratio. The employment or man-hour data must also be comparable as to coverage and classification to the output series used in the comparison. It is usually preferable in this connection that both the employment and production data be obtained from the same source such as censuses of industry.

Assuming it is possible to construct appropriate production and employment or man-hour series, what then is the significance of the productivity figure derived from dividing the production index by the labour index?

According to the International Labour Office, an index of productivity can be constructed to measure either of two basic concepts. In the first concept, labour productivity is considered as a specific characteristic of an individual product, plant or industry for which it is measured; if, for instance, two plants manufacture the same product, and the productivity of either plant has remained unchanged over a certain period, then the productivity of the two plants combined will remain unchanged, even though one of the plants produces at a higher rate of output per man-hour and its share of the combined production has increased. In order to obtain the desired productivity (unchanged) ratio according to this concept, the production index for the two plants combined would have to be constructed whereby the output of each is weighted individually with unit labour requirements. In this way, the larger share of the composite acquired by the more efficient plant will not influence the resulting productivity index when the production composite is divided by the total hours expended in the output of both establishments.

In the second concept, productivity is considered in relation to the relative importance in the group of the constituent products, plants or industries for which the productivity measurement is computed. In this case, the productivity average

for a group of components can change even if the individual productivity for each component remains unchanged because of changes in the relative importance of the components. This is commonly referred to as a productivity index inclusive of the effects of the changing "product mix". Referring to the above example, to measure this concept the production of each plant would be added without allowing for different levels of efficiency and productivity for the two plants combined would be expressed as the ratio of total production (computed with the weight for each plant equivalent to 1) to total man-hours. It will be noted that the implicit weights in this case differ from those used in the first concept where the weights reflected differences in levels of unit labour requirements. Thus the larger share, in the composite, of the more efficient plant is allowed to influence the productivity index which, in this instance, will show an increase.

In practice, the second concept is the more common. In the above example the plants were producing only one product. If each plant were manufacturing a variety of products with different unit man-hour requirements (a more realistic hypothesis) it will be observed that, to measure productivity according to the first concept, each item in the production component would have to be weighted with its individual unit man-hour requirements. While unit man-hours are usually available from censuses of production at the plant and industry level, they cannot be allocated to individual products. If weights other than unit man-hours are applied to the production items, the resulting productivity index will measure the first concept only if the substitute weights are proportional to unit man-hour weights. This seldom is the case, and, as indicated in the above example, (where weights equal to 1 were used instead of unit man-hour weights) the utilization of weights which are not proportional to unit man-hours, corresponds to a shift from the first to the second concept of labour productivity.

The division of an index of output for a specific industry or group of plants by the corresponding man-hour index will normally yield a productivity index which measures the second concept; each item in the production index is recorded in total, not by firms, thus taking no account of the differences in levels of productivity of the various plants which produced it; moreover, the weights used to combine the various production items into a composite index are not generally proportional to unit man-hours. Thus, a shift in output, within the composite from firms with a relatively low level of output per man-hour to more efficient firms, or changes in the relative movements of products, may result in a change of productivity whether or not the productivity ratios of individual plants or products have changed. In summary, removal of effects of the changing "product mix" is impracticable in the general approach, and in order to gain



more knowledge of the influence of this factor, supplementary studies of individual plants are required.

When an index of production is used in the measurement of productivity the kind of weights which have been selected must be carefully scrutinized in order to assess the significance of the measurement. As indicated above, unit man-hours are usually not available at the product level, and substitute weights have to be utilized in the construction of the production index. Thus the resulting productivity index will not measure the first concept as it will reflect the influence of changes in the relative importance of each component as in the second concept. In order of preference, the most commonly-used substitute weights are as follows: value added per unit, value per unit and price.

Although value added per unit is difficult to measure for specific products, approximately the same effect is obtained where a net production aggregate is computed, as explained in an earlier section. Admittedly, census value added per unit is somewhat removed from unit labour requirements, but it has a fairly high labour-cost content and is free of the influence of raw materials. In some industries, of course, relative values added will differ quite considerably from unit labour requirements, due to variations in capital equipment, overhead costs and profits related to the fabrication of individual products. However, these discrepancies in the weighting system are not always reflected. In industries where one product dominates, where there are a large number of products, or where the majority of products have similar movements, the nature of the weights used has little influence. The same observations apply to the use of unit value weights. These, of course, are still further removed from unit labour requirements as they include the cost of raw materials and fuel. Price weights are least related because, in addition to materials and fuel, they reflect transportation charges, handling costs, mark-ups, etc.

The use of these alternative weights which is dictated by the availability of data introduces, then, an element of variation when changes occur in the composition of production. The productivity index will reflect the effect of any shifts from products or plants or industries with high man-hours per dollar value added or per dollar of total value to those with low man-hours per dollar value added or per dollar of total value, or vice versa.

For some studies where shifts in employment from industries with low value added per man-hour to those with high value-added per man-hour

or from low-wage to high-wage industries, are considered relevant, a measure of man-hours per unit derived from a production index with value added weights is appropriate. In this case the use of value-added weights would be by choice rather than necessity. For instance, if data on average wages for a group of industries (total wages for the group of industries divided by total man-hours or number of workers) is compiled for comparison with a measure of productivity for the same group of industries, the average wage figure will reflect the effect of shifts in the relative importance of high-wage and low-wage industries, and it will then be desirable that the productivity measure also reflect the effect of such inter-industry shifts.

It is desirable, of course, that where possible, both concepts of productivity be measured in order to appraise the extent of changes due to shifts in the composition of production. Unit man-hours are seldom available for individual products, but it is usually possible to obtain man-hour data on the plant or industry level from census records. It is possible, for instance, to weight production indexes for individual industries with man-hours when these indexes are combined into broader groups. The resulting productivity index would reflect possible shifts in the composition of production within industries, but not between industries.

The division of a production index with base-year weights (the most common form) by a man-hour index, will yield a productivity index which measures, in any given year as compared with the base year, the changes in man-hours required to produce the "market basket" of goods in the given year. It specifically answers the question: "How do the man-hours that would have been required in the base period to produce the given year's basket of goods compare with the man-hours actually worked in the given year?". A different market basket enters into every comparison with the base year. Thus, strictly speaking, the index for any year can be compared only with the base year and comparisons cannot be made between any two other years.

Thus it is important, when using productivity data, to analyse thoroughly the methods used and the significance of the concept measured. Although it is not possible, by using broad measures of production and man-hours, to account completely for the actual changes in productivity, these measures are nevertheless useful in a general type of analysis. Until more research and analysis has been applied to the basic data than was hitherto possible the Bureau of Statistics does not intend to release official figures of output per man-hour.





**PART II**  
**Industrial Analysis**



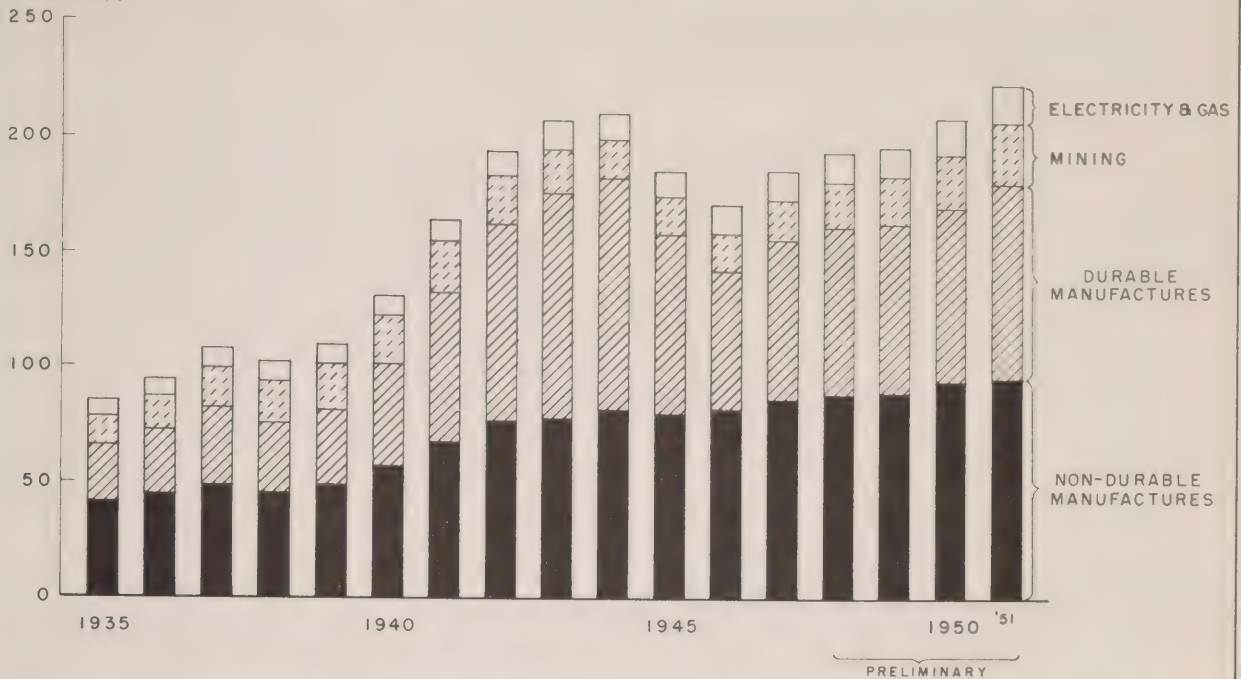


CHART IV

# INDUSTRIAL PRODUCTION, 1935 - 1951

## SHOWING PERCENTAGE CONTRIBUTION OF EACH MAJOR GROUP

TOTAL INDEX  
1935-39=100



## PART II

### Industrial Analysis

The period covered by this report was characterized by unprecedented industrial expansion. Emerging from a depression practically world-wide in scope, industrial operations in this country entered a period of rapid growth which was maintained throughout the war and post-war years without important interruption.

A problem confronting business economists is to determine how much of the post-war industrial "drive" was due to normal growth factors and how much of it was caused by the backlog of war accumulated demand. While it is true that the greatest demand accumulation took place in housing and consumer durables, non-durables such as textiles and clothing also started the post-war period with a sizeable backlog of unfilled demand. It is now becoming apparent, after the vigorous pace of business following the outbreak of hostilities in Korea, that a considerable portion of this demand has been satisfied and some industries, notably textiles, clothing, and major appliances, are experiencing difficulties. However, overall prospects appear

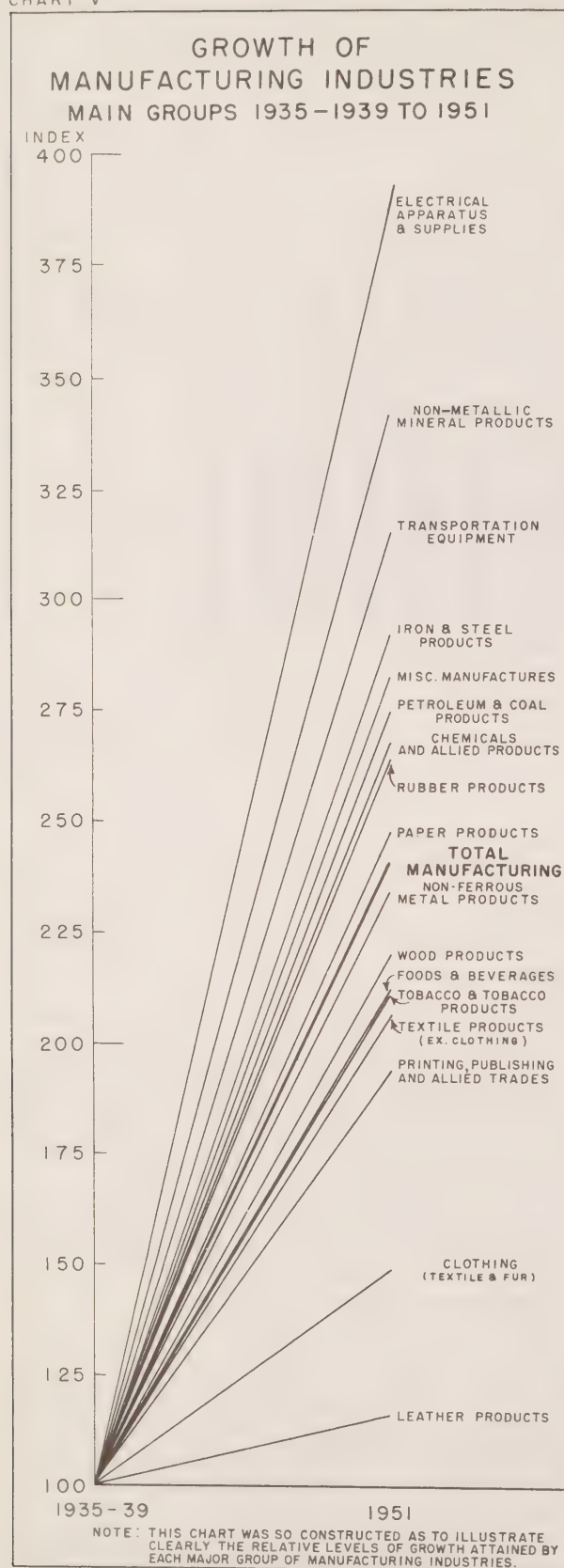
bright for the near future. The increased productive activity which will result from the present very high level of capital investment is not as yet fully reflected in current production statistics. Huge expansion and development programmes are well under way in iron ore, aluminum and other metals, oil, steel, chemicals, motor vehicles, electric power, and in a number of other industries. In addition, federal government expenditures for national defence are increasing rapidly and should exert a growing influence on the economic picture.

### Manufacturing Production

The volume of output of manufactures rose steeply after the outbreak of hostilities in 1939. Productive facilities responded quickly to the urgent requirements of the armed forces. In the early days of the war the production assignments allotted to the nation were comparatively simple, but as the pre-war weapons became obsolete and as Canada proved herself capable of turning out larger and more complex equipment, the assignments constantly shifted,



CHART V



changed and grew more difficult. The production figures merely suggest the magnitude of the achievement. They cannot describe the tremendous effort needed to convert a semi-agricultural country into a wartime arsenal nor the complications which arose because of shortages of manpower, tools and materials.

The productive peak was reached in 1944, when weapons, supplies and equipment were rolling off the assembly lines at a record-breaking pace. The end of hostilities and the subsequent reconversion to peace-time production were attended with declines in output in 1945 and 1946. The upward trend was resumed, however, in 1947. The rate of advance slackened moderately in 1948 and 1949 but regained most of its 1947 impetus in 1950 and 1951 when the renewal of hostilities in Korea resulted in heavy anticipatory buying on the part of consumers and in growing expenditures for national defence. A remarkable feature is that in 1951, the index of the volume of manufacturing production had practically equalled the record wartime level of 242.3 established in 1944.

### Durable Manufactures

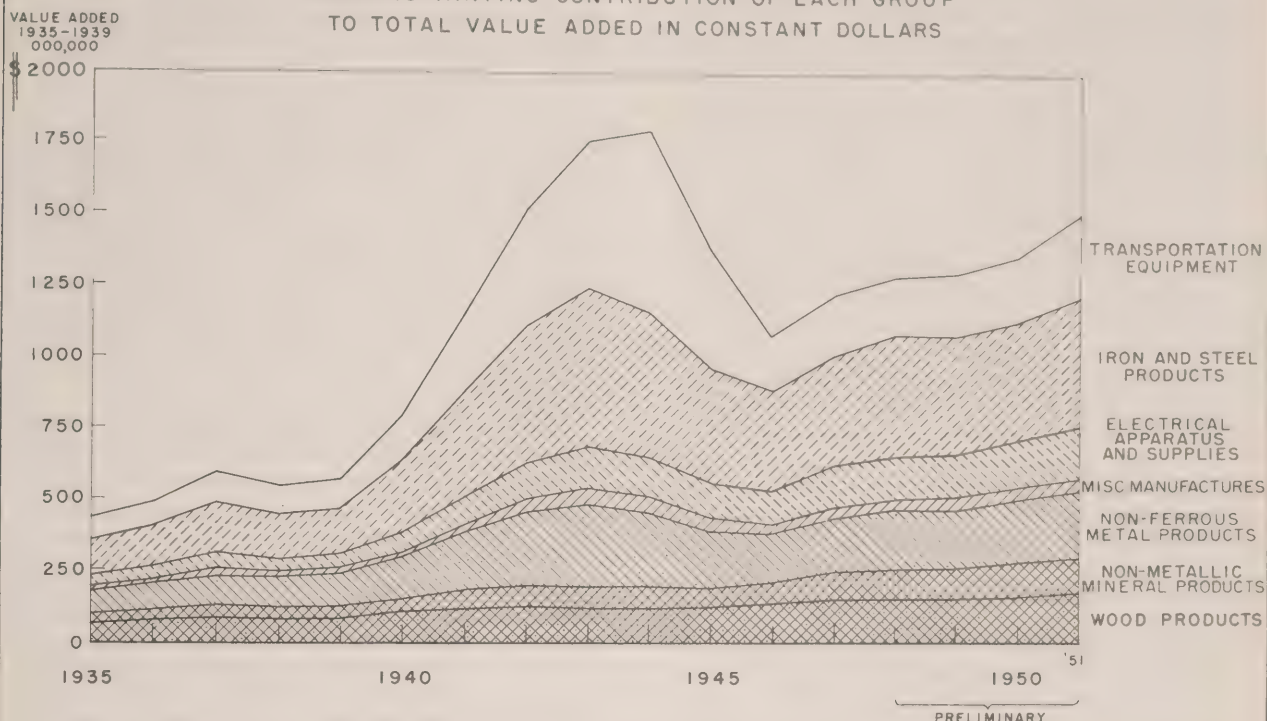
The tremendous increase in physical output during the war years was mostly concentrated in the durable goods sector. When war was declared in September, 1939, there were virtually no armament works, no production of large ships and large planes, no guns, no tanks. Within a few years Canadian plants were turning out naval and merchant ships, warplanes ranging up to the 15-ton Lancaster bomber, military vehicles, millions of rounds of ammunition and hundreds of other war items. On the base of 1935-39 the new volume index of durable manufactures reached a peak of 340 in 1944. In the following two years it declined sharply and stood at 205 in 1946. Since then it has regained more than half the lost ground, and reached 286 in 1951.

The largest gain occurred in the output of **transportation equipment**. Due principally to the tremendous increases in production of ships and aircraft, the index for this group of industries rose to the record level of 694 in 1944, the year of maximum war production. After reaching a postwar low of 222 in 1946, the index rose moderately during the next three years, but, spurred by the great demand for passenger cars and by the renewal of defence production, marked gains were made in 1950 and 1951. In 1951 the index stood at 315.

Before the war, aircraft production was only a minor industry in Canada. The annual average output during the five years up to 1939 was about 160 airplanes, and the industry employed only 1,300 workers. By 1943, aircraft and parts production had become one of the outstanding industries of the country. The annual rate of output had reached 4,000 planes and more than 80,000 men and women were employed. By the end of May, 1945, a total of 15,905 aircraft had been produced. Output dwindled rapidly after the

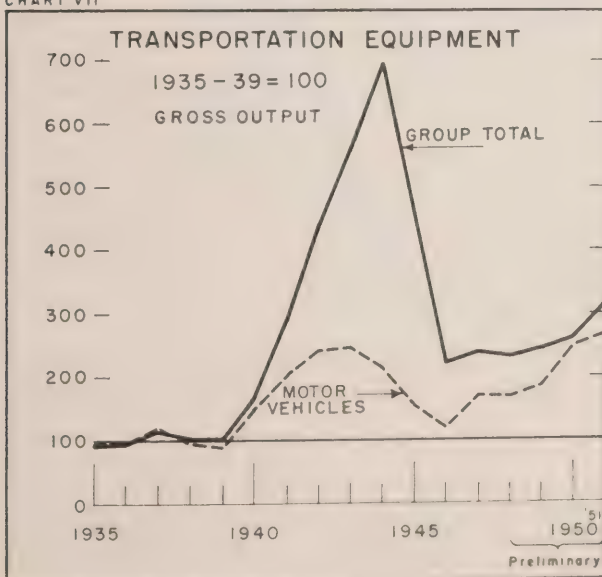
CHART VI

**DURABLE MANUFACTURES, 1935-51**  
SHOWING VARYING CONTRIBUTION OF EACH GROUP  
TO TOTAL VALUE ADDED IN CONSTANT DOLLARS



cessation of hostilities. From a maximum of 9,453 (1935-39 = 100) in 1944, the aircraft index had dropped to 853 by 1948. With the advent of the new emergency, the industry is gradually becoming more active.

CHART VII



The "Shipbuilding and Repairs" industry followed a similar trend. The industry had been dormant in Canada for more than 20 years before the war. From 14 fairly large yards with limited facilities and about 15 smaller boatworks in 1939, the Canadian shipbuilding industry grew to 25 major and 65 smaller yards by the end of 1944. Employment jumped from 4,000 in early 1940 to 75,000 in 1943, the year of peak activity when the production index for the industry reached 2,193. As in aircraft, output declined sharply after the war and the index reached a post-war low of 308 in 1950. Defence orders resulted in a considerable advance to 403 in 1951.

Second only to the United Kingdom, Canada was the principal source of mechanized transport for the armed services of the British Commonwealth. During the years before the war the Canadian motor vehicles industry had developed considerable facilities and these permitted easy conversion to wartime needs. Until the first military vehicles came off the assembly line the automotive programme was based almost entirely on Canadian needs; but after the British lost nearly all their equipment on the beaches of Dunkirk, Canada was called on to produce to full capacity, and all limits were removed from the programme. During the first 15 months of war, nearly 80,000 army vehicles were turned out and by 1941 Canada had achieved her status as a major producer of mechanized transport. During 1942, 100 different

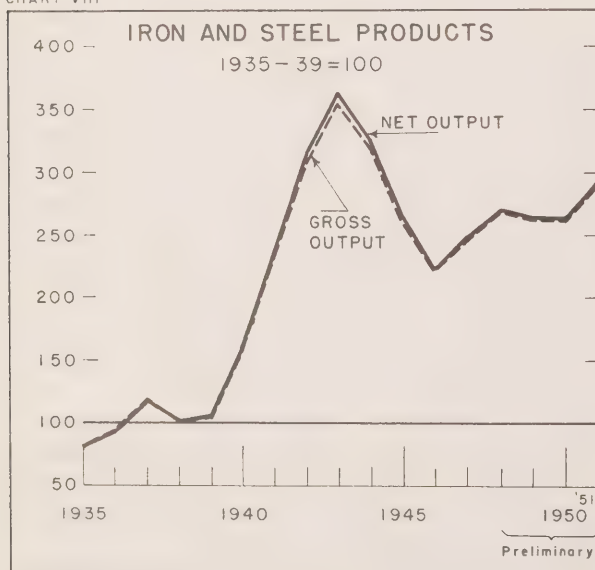


types of motorized military equipment left Canadian assembly lines at the rate of 3,500 units of mechanized transport and 300 fighting vehicles each week. The list included universal carriers, scout cars, artillery tractors and trailers, troop and ammunition transports, service workshops, radio trucks, ambulances and fire trucks. This impressive development was aided by the fact that the production of passenger cars was sharply curtailed. At the same time, the output of trucks and buses was limited to essential civilian needs.

The production index for the **"Motor Vehicles"** industry reached its highest wartime level in 1943 when it stood at 247. It dropped rapidly thereafter until in 1946 it was only 20 percent higher than in the base period. Production recovered sharply, however, with the resumption of civilian demand for passenger cars after the war, and by 1951 the index had passed the wartime peak and had reached the record-breaking level of 264.

The **"Railway Rolling Stock"** industry was less affected by military requirements because its normal output could be used for wartime purposes. In addition to production of freight cars and locomotives and repairs to rolling stock, however, the industry produced a large amount of munitions and armaments. From a high of 199 in 1942, the index declined steadily until 1947 when it reached a post-war low of 167. Since then the industry has been more active and in 1951 the index averaged 187.

CHART VIII

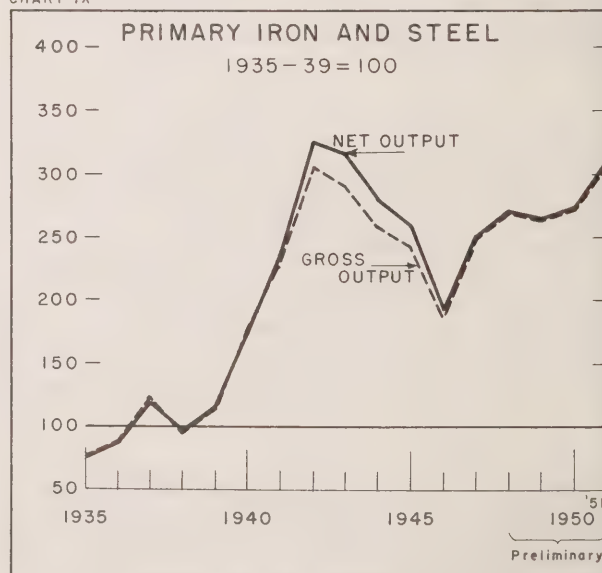


The **iron and steel** group of industries was also considerably affected by war requirements. As most of the industries in this sector were more firmly established in the pre-war period, they did not expand relatively to the same extent as shipbuilding and aircraft. When European supplies were cut off early in the war, the Canadian basic steel industry had to rely on the United States for a greater supply and

had to increase its own steel-making capacity to meet abnormal wartime requirements. However, development of the industry did not halt with the end of hostilities. Canada's industrialization programme, together with strong post-war demand for consumers' durable goods, led to steady expansion of the industry so that by 1951, compared with pre-war, pig-iron output had more than tripled and steel ingot and casting production had risen by more than 165 percent. A considerable volume of additional capacity is now under construction and should reduce still further the country's dependence on United States imports of finished and semi-finished iron and steel shapes. Indicative of the rapid growth of the industry in recent years is the amount of funds expended for new plant, machinery and equipment. From a total of \$44 million in 1950, new investment jumped to \$105 million in 1951 and intentions for 1952 reached a record high of \$165 million.

A comparison of the gross and net volume indexes of the **"Primary Iron and Steel"** industry reveals that during the war period the net index had risen progressively higher than the gross. In 1942, at the peak of wartime operations, the volume of net output was 7 percent higher than that of gross output. This was due principally to relatively greater production of the more highly processed shapes such as plates, sheets, bars and special alloy steels, and output of such war items as gun and shell forgings. The gap between net and gross output narrowed rapidly after the war when the industry reverted to its peace-time pattern of production. The net index in 1951 had attained a level of nearly 311, having been exceeded only in 1942 and 1943 when the index stood at 327 and 317, respectively.

CHART IX



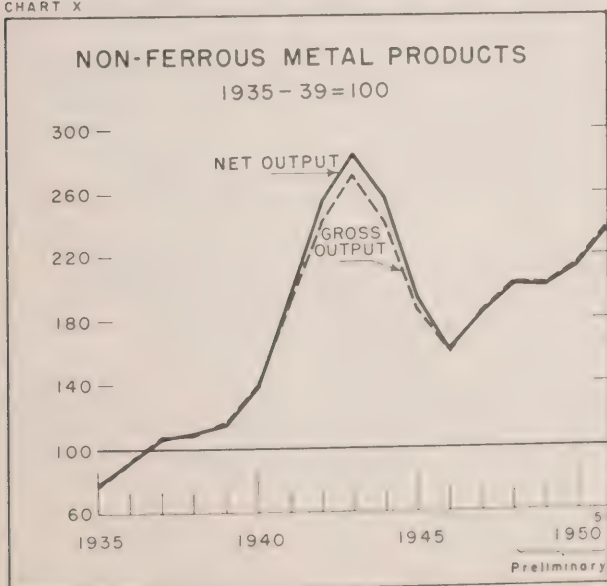
The **"Iron Castings"** industry followed a similar trend. After rising rapidly up to 1942, when the index reached 218, production declined steadily until 1946. Since then, however, as a result of

strong post-war demand for commercial iron castings and iron and steel pipe and fittings, the volume of output has gained markedly and in 1951 the index, at 281, had attained its highest level. The varying differences between the levels of the gross and net output indexes during the war and post-war years are due mainly to relative changes in the volume of production of commercial iron castings and steel pipe and tubing. The latter have a proportionately lower work-content, fabrication in the industry being applied to materials at a more advanced stage of transformation.

The volume of output in the **"Wire and Wire Products"** industry moved similarly to that of iron castings. Advancing rapidly to a wartime peak in 1941, the index developed a declining trend until 1946 when it stood at 165. Output jumped 23 per cent in 1947, remaining about steady for the next three years. A further substantial advance was recorded in 1951 when the index rose 12 per cent to a level of 227, an historical maximum.

During the war, armament production in the iron and steel group was concentrated in the **"Miscellaneous Iron and Steel"** industry. Large-scale output of tanks, guns and gun mountings, machine guns, rifles, heavy shells, etc., resulted in a forty-fold increase in production in 1943 and 1944 compared with pre-war. Those fabricating industries such as **agricultural implements**, and **heating and cooking apparatus**, in which normal peacetime output was considerably limited during the war years, continued to expand after the war. Production of **agricultural implements** especially made a strong post-war recovery. Accumulated demand for farm machinery resulted in a record volume of production in 1948 and 1949. In the latter year the volume index stood at 449. In 1950, the index dropped 19 per cent but recovered moderately in 1951. After record wartime levels of output, post-war activity in the combined **machinery and machine shops** industry stabilized at about three times the pre-war rate.

CHART X



Production in the **non-ferrous metals** group of industries reached a wartime maximum in 1943 when the net index stood at 285. During the next three years, output dropped 44 per cent, but recovered steadily thereafter, backed by sustained demand for base metals. Aluminum is being fabricated into an ever-increasing variety of commodities, and production of aluminum bars and rods, sheets, shapes, etc., reached record proportions in the post-war period. During the war years, aluminum sheet production was of a strong alloy type used principally in aircraft construction and required more fabrication than the regular type of sheet used in the production of cooking utensils and other civilian items. This contributed to the higher level of the "net" volume of the **"Aluminum Products"** industry during that period. In subsequent years, changes in the composition of production resulted in a reversal of this trend so that the "gross" index rose slightly higher than the net. A similar situation arose in the **"Brass and Copper Products"** industry. Large-scale wartime output of cartridge cases and discs together with other munitions and war items required relatively more processing than the industry's normal production of brass and bronze castings and copper sheets, wire rods, etc. In addition, much more brass and bronze scrap was used as material during the emergency than in peacetime operations when ingot supply is more plentiful. The result was that the net index was considerably higher than the gross during the war years. The gap between the two levels narrowed in 1946 as the production of munitions was halted and in 1947 the gross index was moderately higher than the net.

The important **"Non-ferrous Metal Smelting and Refining"** industry reached its highest level of output in 1943 when the index stood at 225. The essential metals for the waging of an all-out war, such as aluminum, nickel, copper and lead, were produced in record-breaking volume. Demand gradually receded after 1943 and the index declined steadily until 1946. Strong foreign and domestic demand during the post-war boom, and the subsequent renewal of defence production reversed the downward trend and the volume of output increased markedly from a level of 124 in 1946 to 208 in 1951, a gain of 68 per cent in a period of five years. Much of the industry's output is destined for sale abroad. In 1951, for example, Canada exported 96 per cent of her nickel, about 80 per cent of primary aluminum, 56 per cent of copper, 80 per cent of lead and 92 per cent of zinc.

To meet the need for electrical and radar equipment and signalling devices, the **"Electrical Apparatus and Supplies"** industry manufactured articles during the war which were previously not made in Canada. Output of civilian radio receiving sets and appliances was severely curtailed as the industry converted the major part of its productive capacity to the manufacture of war instruments. The production index reached a wartime peak of 312 in 1944 and declined during the next two years. The industry recovered rapidly, however, as a result of accumulated demand for radios, consumers' appliances and heavy electrical equipment, and by 1951 the index had jumped 59 per cent from its 1946 post-war low to a level of 392.



CHART XI

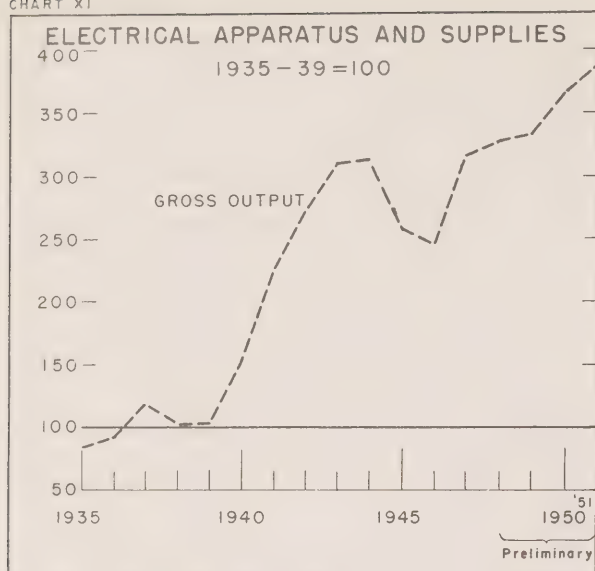
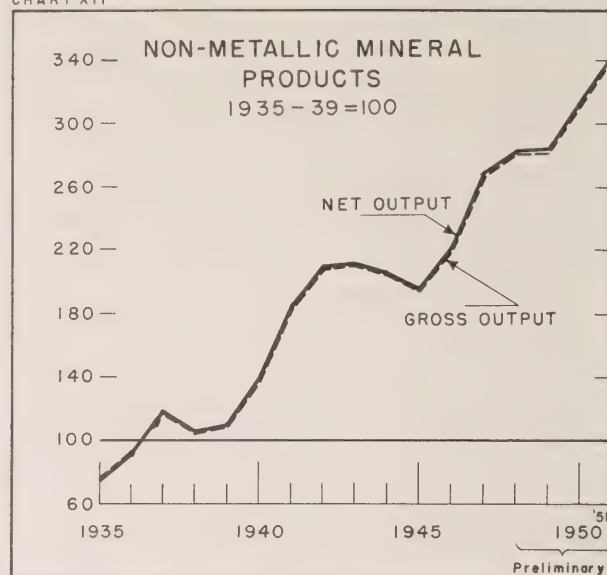


CHART XII



Military requirements did not affect the nature of output in the **non-metallic mineral products** group of industries. In war or peace, the bulk of production consists of construction materials such as cement, cement products, building brick, lime and gypsum products, glass, stone products, etc. During the war, under government control, a major proportion of these industries' products were channelled into construction of new war production plants, extensions to pre-war plants, housing for war workers and the building of training and operation facilities for the armed services. No serious reconversion problems were encountered by the non-metal industries immediately following the war. After a slight pause, following the peak of wartime output, plants turned their productive capacity towards meeting the unprecedented demands of the post-war construction boom. From a wartime maximum of 212 in 1943, the volume index dropped moderately in 1944 and 1945, but rose steeply in succeeding years to reach the record level of 342 in 1951. Differences between the volume of gross and net output were rather negligible in these industries. The only gap of any consequence between the two levels occurred in the "Miscellaneous Non-metallics" industries. The production of electrodes, a commodity with a relatively high unit value added increased greatly after the start of the war and fluctuated widely in the post-war period, resulting in a varying gap between the levels of gross and net output.

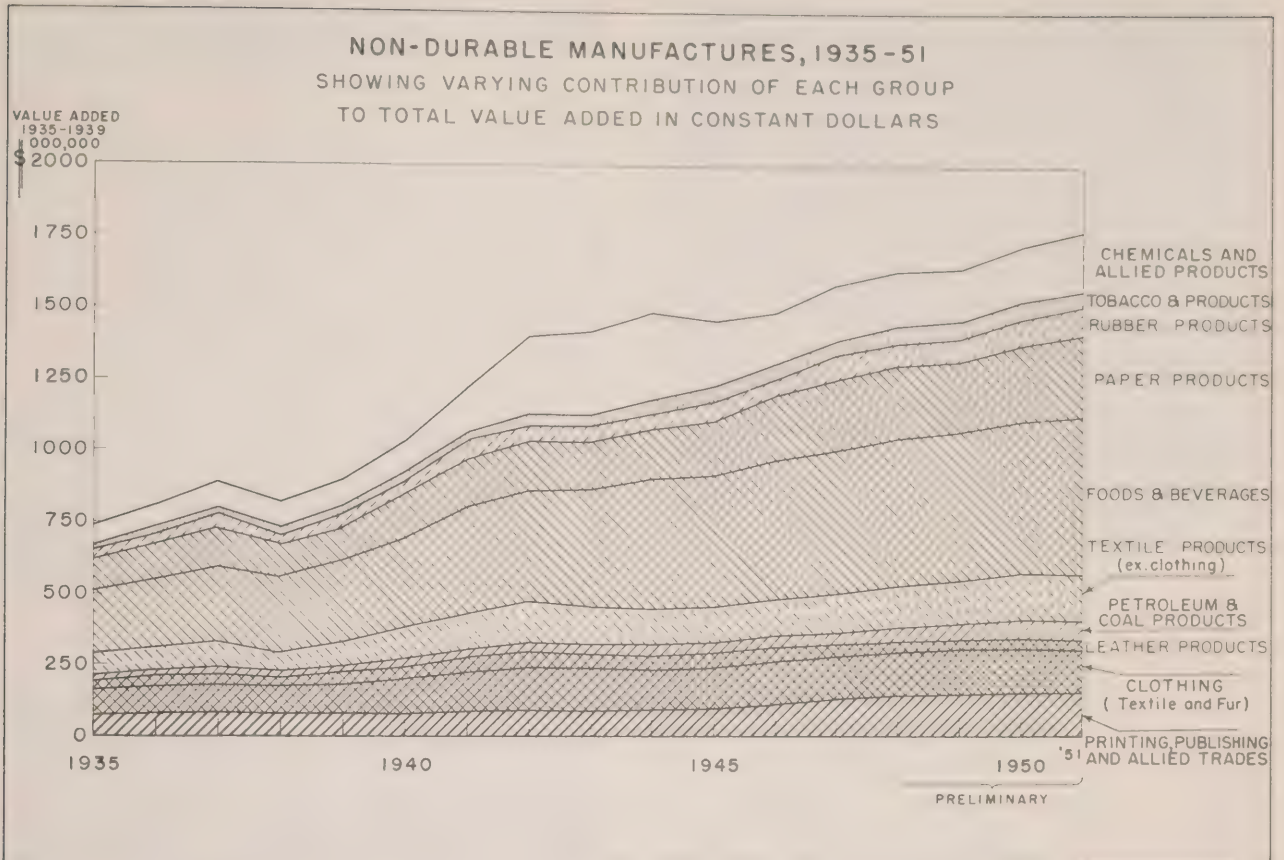
In the durables sector, the **wood-using** industries were the least affected by the war. The volume of output of wood products expanded steadily without serious interruption throughout the war and post-war years. In 1951 the index stood at 221, the highest on record. The two most important industries are "Saw-mills" and "Furniture". The index representing the former, after reaching a wartime maximum of 140 in 1942, declined considerably in 1943, and hovered around 124 during the next three years. Beginning

in 1946, however, output rose sharply, spurred by strong foreign and domestic demand for sawn lumber and by 1951, the index had advanced to 168. Production in the furniture industry expanded throughout the period under review. The great increase in residential construction in the post-war period, together with the marked gain in new family formations created a boon for producers of house furnishings. Output of furniture jumped sharply in the three years immediately following the end of the war and rose more gradually during the subsequent period. The volume index reached a maximum of 234 in 1951.

CHART XIII



CHART XIV



### Non-durable Manufactures

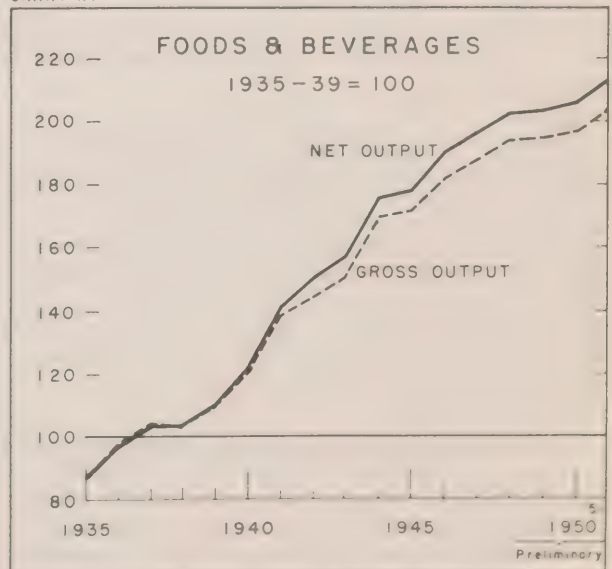
The trend of output in the non-durable sector of manufacturing was visibly smoother than in the durable sector. Except in two years, 1938 and 1945, there has been no interruption in the upward movement of production during the period under review. Despite the fact that war contracts quickened the pace of output in some of the industries, production continued to expand after the war, although at a slower rate. Unlike durable goods, non-durable commodities are mostly consumers' goods and are less influenced by sudden changes in the international situation or the capital investment programmes of producers and governments. By 1951, the non-durables index of output had reached 214, the highest on record.

The production of processed foods and beverages rose without pause throughout the period. The overall gap between gross and net output developed early in the war, due mostly to changes in the composition of production, and has not altered significantly since 1942. In 1947, the last year for which a net index could be computed, net output was 4.6 per cent greater than gross output. In 1951, the group "net" index registered a level of 209. 213

A characteristic of most manufactured foods industries is the high ratio of the value of materials consumed to the value of products, indicating a

relatively low degree of fabrication per unit of output. The "net" aggregates for these industries are consequently extremely sensitive to even minor changes in the composition of production or in the amount of processing applied to the raw materials.

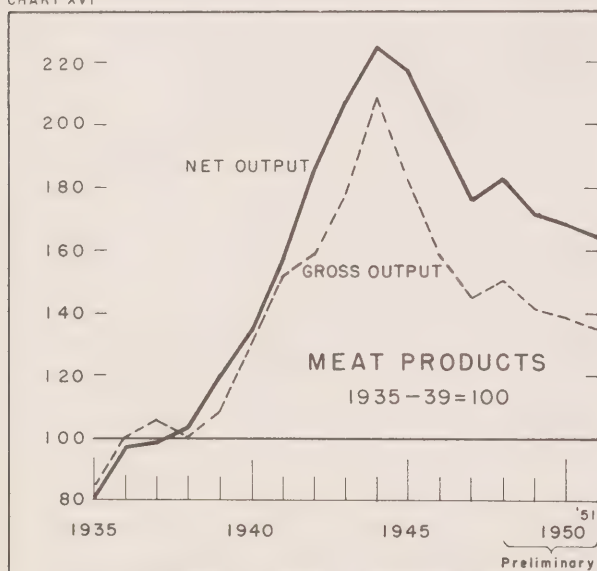
CHART XV





After 1944, the drop in overseas demand for meat products resulted in a curtailment of production in the meat-packing industry. After reaching a wartime peak of 225 in 1944, the meat products index has been declining ever since and in 1951 stood at 164. In recent years, the production of canned and cooked meats has increased greatly in comparison with that of fresh and frozen meats. The relatively greater amount of processing involved in producing the former was an important factor in the difference of level between the gross and net indexes. Other products requiring more processing than fresh and frozen meats are bacon, hams, shoulders and other cured meats. Variations in their volume of output also had a marked influence on the movement of the net index. Again, the industry has become more efficient in the utilization of its raw materials, viz., the animals slaughtered: what previously had been considered as waste is now being converted into a host of saleable products so that very little of the animal residue is rejected.

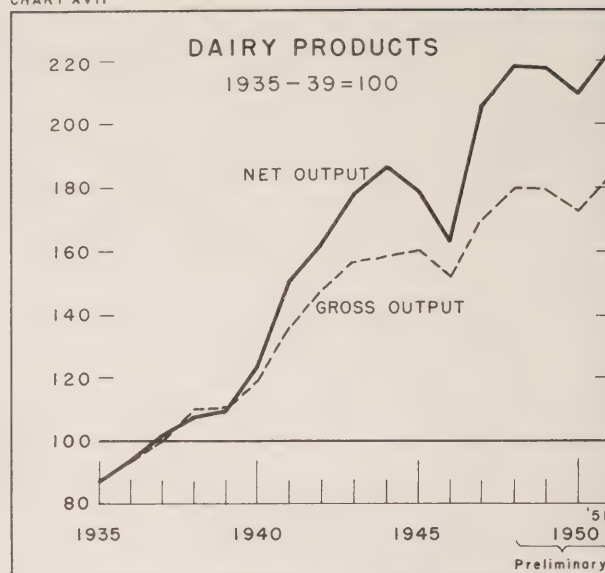
CHART XVI



In the "Dairy Products" industry, the declining trend in the output of butter and cheese since 1942-43 was more than offset by marked gains in the production of ice cream and concentrated milk products. The aggregate net index for the industry rose steadily until 1944, and after dropping moderately in 1945 and 1946, resumed its upward movement in 1947, attaining a peak in 1951 when it stood at 222. Differences between the levels of gross and net output were discussed in an earlier section.

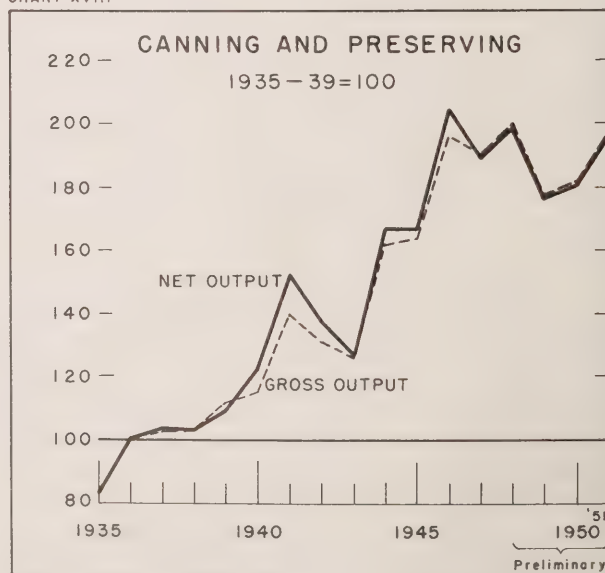
The "Canning and Preserving" industry followed a rather irregular trend during the period under review. Net output of processed fish products attained a maximum in 1941 when the index registered 174. After declining for the next three years, production recovered in the early post-war period only to recede

CHART XVII



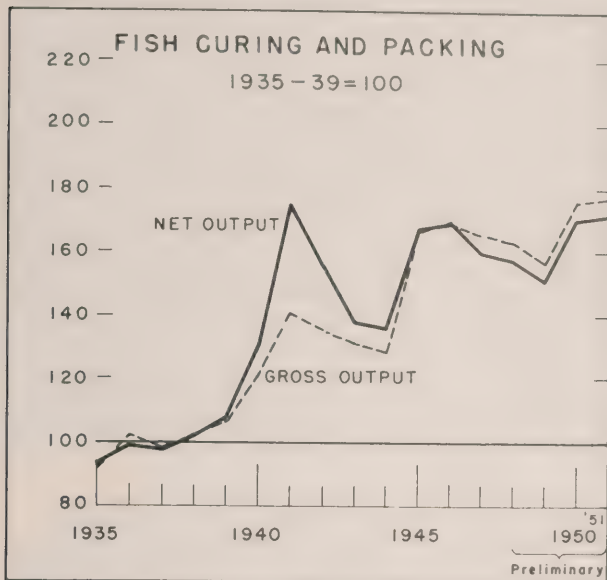
again in 1947, 1948 and 1949. Output gained considerably in 1950 and remained practically unchanged in 1951 when the index stood at 171. An important reason for the wide gap between the gross and net indexes during the war years was the comparatively sharp gains in the production of canned herring, a commodity whose value added is considerably higher than other products such as fresh and frozen fish, cured or smoked fish, etc. It was calculated that this item alone accounted for about 60 percent of the difference between the two indexes. The peak in canned fish output was reached in 1941 when the gap between gross and net output was largest. The subsequent decline in the ratio of canned fish to total volume of production in the

CHART XVIII



industry was accompanied by a narrowing of this gap until 1945 when the levels of the two indexes became practically identical.

CHART XIX

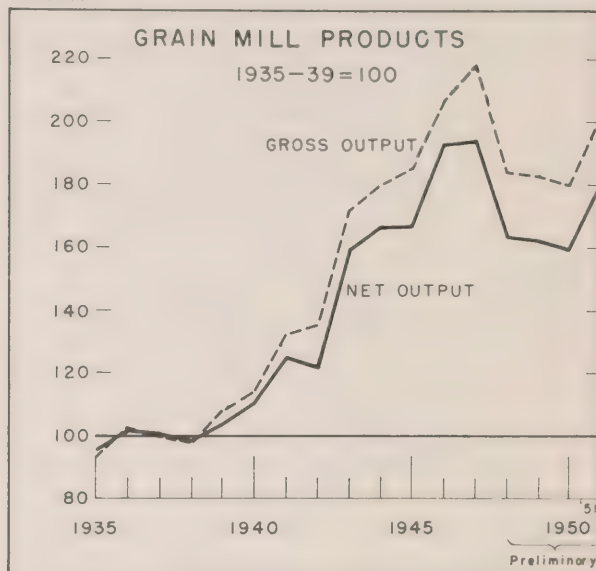


Production of **fruit and vegetable preparations** was also irregular throughout the period. The index reached its highest point of 223 in 1946 when output of canned soups and vegetables was at its peak. After declining to 204 in 1947, production recovered in 1948, but receded again in 1949 and 1950. In 1951, the index rose to 208. There was no significant difference between the levels of the indexes of gross and net output.

The net index of **grain mill products** kept rising until 1947 after which it declined for three successive years. In 1951 it advanced to 180 to stand 7 per cent below its 1947 level of 193. A feature was the marked increase in the production of **stock and poultry feeds**, although some of the gain resulted from the transfer in 1944 of a number of firms from the meat-packing industry. Increased use of commercial rather than farm-produced feeds may be operating here to create a somewhat fictitious increment from the viewpoint of the economy as a whole, although a genuine increase in manufactures has taken place. **Flour milling** developed a declining trend in the post-war period as foreign demand dropped from its high wartime levels. From a maximum of 163 in 1946, the net production index receded steadily to 105 in 1949, recovering moderately in the next two years to a level of 117 in 1951. In both the flour and feed milling and the prepared stock and poultry feeds industries, changes in the composition of production during the period contributed to the considerable differences between the net and gross indexes, the output of commodities with relatively low values added per unit increasing to a greater extent than those with a higher degree of

fabrication. In the flour and feed milling industry, for instance, production of flour, millfeeds and chopped grains, the combined net value of which was estimated at about 15 per cent of the corresponding gross in the base period generally increased at a faster rate than production of rolled oats, oatmeal, breakfast foods, etc., which require considerably more processing.

CHART XX



Output of **bread and other bakery products** showed a steady upward trend until 1946 after which production dropped to slightly lower levels during the succeeding three years. Output recovered, however, in 1950 and 1951. A feature was the marked increase in the contribution of buns, pies, cakes and pastries to the volume of output. The growth in output of these bakery products was considerably greater than that of bread, but these changes in "product mix" did not result in any considerable differences between the levels of gross and net output.

Production of **other processed foods** maintained a rising trend throughout the period. Under this category are classified such industries as biscuits, confectionery, sugar, malt mills, starch and glucose, miscellaneous foods, etc. In 1951, the combined index of these products stood at 199, about 5 per cent below the record level of 209 established in 1950. The net index was consistently above the gross for most of the period and in 1947 the gap was about 10 per cent. Proportionately greater increases in such products as chocolate bars and powdered eggs, which require more fabrication than other important commodities like bulk chocolate, biscuits, tea, coffee, etc., no doubt contributed to the discrepancy between the two indexes.

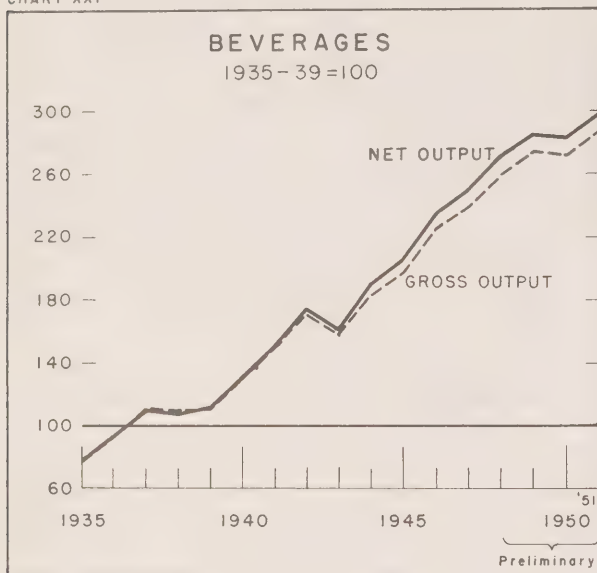
The advance in the production of **beverages** was practically uninterrupted from 1935 to the present. In 1951, the volume of output was nearly 3 times what it was in the base period. The largest in-



creases were recorded in the **aerated waters** and **brewing** industries. The indexes of both these industries attained levels approaching 320 in 1951. **Wine** production, after reaching a peak in 1947, dropped 36 per cent in the following three years. Output of **liquor** climbed steadily until 1946 when the index reached 209. During the next four years, the volume of production fluctuated within narrow limits and in 1951 advanced sharply to an index level of 260. The great demand for cigarettes for

The contribution of the "**Rubber Products**" industry to the war effort was mainly in the form of tires and tubes for military vehicles and aircraft. Production of passenger car tires and tubes was sharply curtailed as was the output of rubber footwear. After marked increases in 1940 and 1941, the index remained more or less stationary at around 150 until 1945 when civilian production was resumed and the index jumped to 180. The industry-wide strike in 1946 contributed to a decline in that year, but record-breaking demand for the industry's output led to sharp advances in the following years, and in 1951 the index had reached the maximum level of 264. As the value added per unit of output is considerably higher for footwear than for tires and tubes, the decline in the production of the former during the war years contributed to the lower level of the net index. The widest gap occurred in 1942 when the net index was 13 per cent below the gross. The recovery of footwear production in the following years resulted in a narrowing of this discrepancy so that in 1947 the two indexes were within 6 per cent of each other.

CHART XXI



members of the armed forces during the war contributed largely to the considerable increase in the **tobacco products** index which reached the record level of 230 in 1945. The index dropped to 204 the following year, but rose gradually thereafter to 228 in 1950. Weakening demand led to a decline of 7 per cent in 1951.

CHART XXII

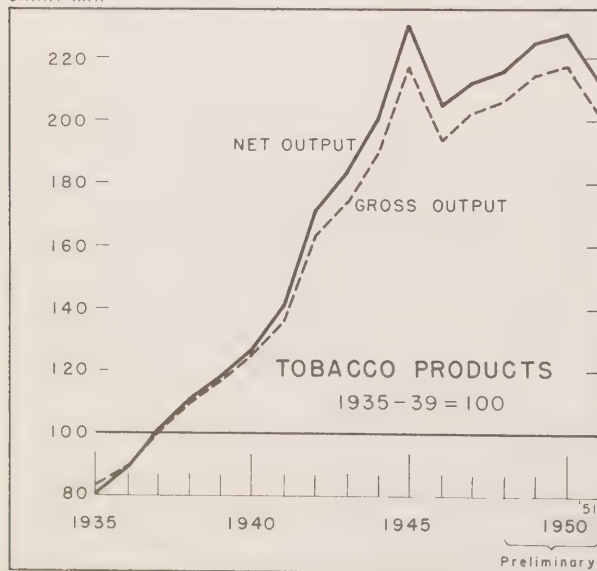
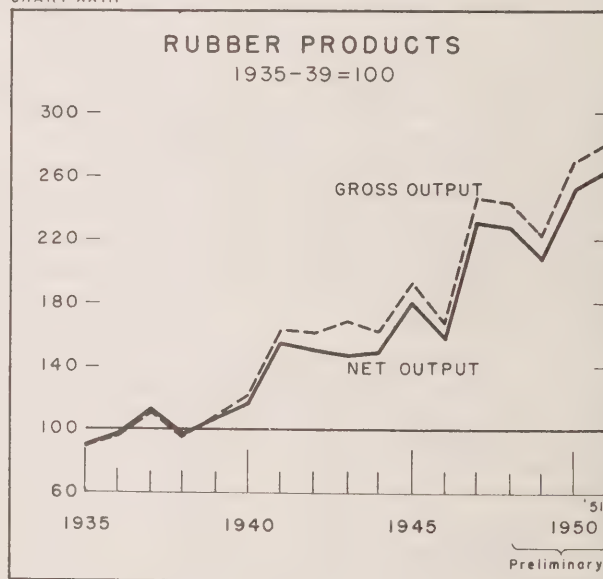


CHART XXIII

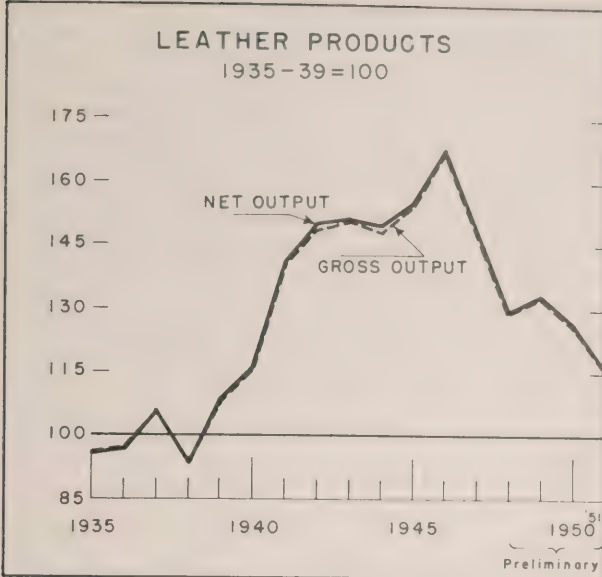


Output of **leather products** rose steadily until 1946 when the index reached a high point of 168. The subsequent easing of foreign demand for the industry's products contributed to the gradual decline of production in the post-war period with the result that this industry has shown the smallest growth of any in the manufacturing sector. In 1951, volume of output was only 17 per cent greater than in the base period. Production of leather tanneries was actually 15 per cent lower than in 1935-39, but output of boots and shoes and other leather products declined to a lesser extent. Since 1946, the overall index dropped 30 per cent.

CHART XXIV

### LEATHER PRODUCTS

1935-39=100



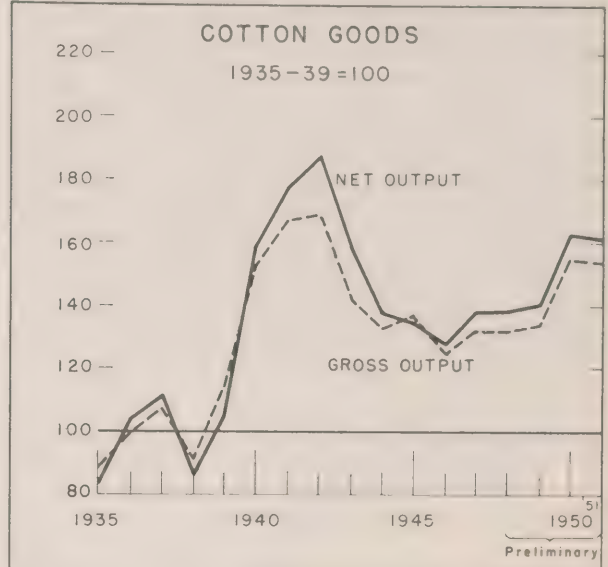
The **textile (ex. clothing)** industries reached their maximum wartime level of output in 1942 when the net index stood at 187. Production then fell off gradually until 1946 but recovered sharply in the post-war period to an index level of 212 in 1950. A slackening of demand for textile products in the latter half of 1951 resulted in a moderate decline in the index for that year. The movements of individual industries within the group have varied over the period. After reaching its highest level in 1942, the production of **cotton goods** declined steadily until 1947. After varying but fractionally in 1948 and 1949, output jumped 16 per cent in 1950 and remained practically unchanged in 1951, the recession in the last six months of the year just about offsetting the gains recorded in the first half. Contributing to the

higher level of net output during the period 1940-1943 in this industry was the comparatively sharp increase in production of piece-dyed and printed and painted fabrics which require considerably more processing than ordinary grey fabrics. When output of these two types of cloth declined to more normal levels, the gap between the gross and net indexes gradually narrowed.

CHART XXVI

### COTTON GOODS

1935-39=100



The peak in **woollen goods** output was also attained in 1942 when demand for heavy military cloth was at a maximum. From a level of 183 in 1942, the index dropped to 160 in 1944. It gradually rose again to 180 in 1947, but has been steadily declining since then and averaged only 146 in 1951. Variations between the levels of gross and net output are attributed mainly to the woollen yarn industry where changes in the production of woollen and worsted yarns which differ considerably in unit value added have influenced the size of the gap between the two indexes. In addition, the industry has shown a tendency towards greater integration whereby it starts processing the material at an earlier stage than formerly: the proportion of raw wool to total materials consumed has risen considerably whereas that of wool tops, a material at a more advanced stage of fabrication, has declined somewhat.

CHART XXV

### TEXTILE PRODUCTS (EX. CLOTHING)

1935-39=100



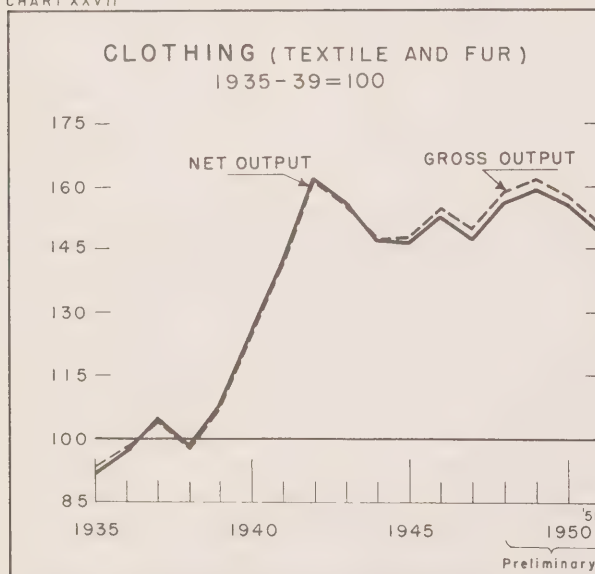
Since 1938, the production index for **synthetic textiles** showed an unbroken record of increases and in 1951 stood at 393. Much of the credit for increasing consumer acceptance of synthetics belongs to the achievements of research in improving manufacturing and dyeing techniques and in the development of new combinations of various fibres with a new range of qualities and practical applications. Synthetic fibres are now being used in the fabrication of a host of commodities such as suitings, overcoatings, blankets, carpets, draperies, upholstery



products, tire fabrics, etc., in addition to hosiery, dress fabrics and other women's wear. Moreover, Canadian producers are now supplying the bulk of domestic synthetic raw material requirements which were formerly imported from the United States. As a result, new investment outlays by the industry have increased considerably in the post-war period.

The trend in the physical output of **clothing** was similar to that of other textiles, the production index reaching a peak of 162 in 1942, then declining gradually until 1947. It recovered in 1948 and 1949, but has been dropping moderately since then and was at a post-war low of 150 in 1951. The industry is now facing keen competition and a more selective retail demand by improving manufacturing methods and styling in order that more desirable merchandise be made available at lower prices. Weak demand during the latter part of 1951 contributed to a marked decline in the probable level of new investment in durable physical assets for 1952. Funds expended for new plant, machinery and equipment dropped from an average of \$12.2 million a year for the period 1945-1951 to expenditure intentions of \$6.6 million for 1952.

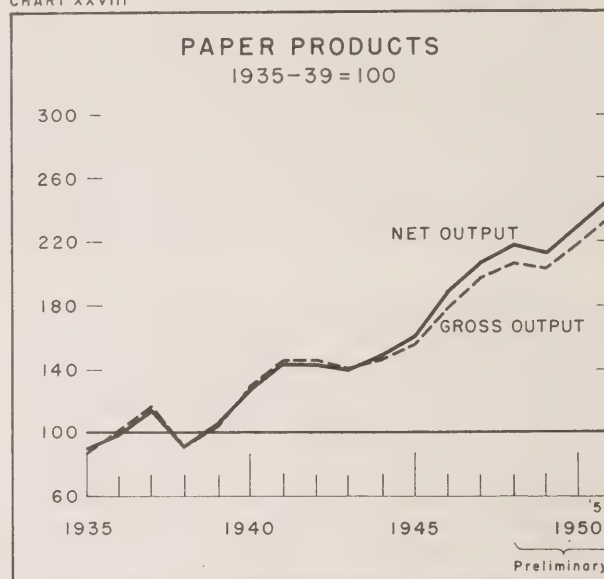
CHART XXVII



Production of **paper products** advanced sharply in the post-war period. The level of the index remained relatively steady from 1941 to 1944, but increased 66 per cent in the succeeding seven years to a record figure of 245. Activity in this sector of manufacturing is influenced mainly by the "**Pulp and Paper**" industry, which, in terms of value added, is the most important single manufacturing industry. In the last few years, the net value contributed by pulp and paper mills was more than twice that of any other industry. The growth of this industry during the period under review was characterized by two distinct phases. From 1935 to the end of the war, new investment by the industry was designed

mainly to replace worn-out machinery and equipment and increases in output were principally the result of utilizing idle capacity after the depression of the thirties. Since 1945, however, with strong world demand for wood pulp and newsprint, together with the availability of necessary materials for expansion, the construction of new plant and the installation of new machinery and equipment reached record proportions and the volume of output rose about 60 per cent. New investment intentions for 1952 are estimated at \$149 million, a record high.

CHART XXVIII

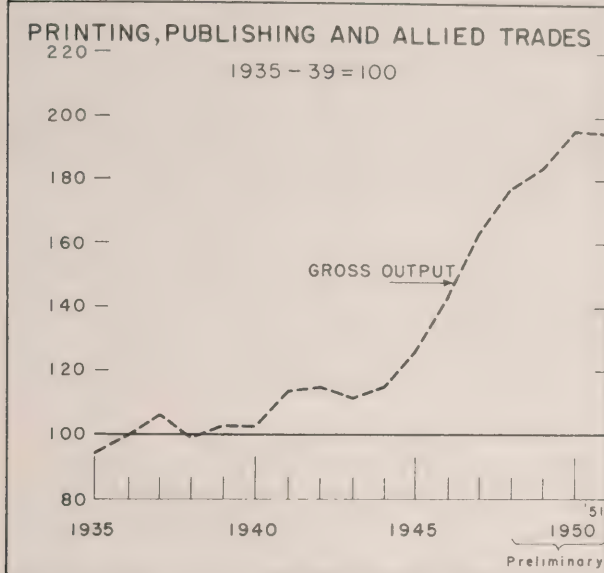


In recent years, a greater proportion of pulp retained for consumption in Canada has been used for the manufacture of fine papers. The increase in newsprint production in later years has not kept pace with the more processed varieties of paper. In the base period, for example, newsprint accounted for 71 per cent of the total volume of output in the industry, whereas in 1947 it contributed only 61 per cent. This was a factor in the increasing ratio of net output to gross output in the post-war period; in 1947 the net index was 190 and the gross 178, nearly 7 per cent lower. Another contributing cause was the declining consumption or purchased power per unit of output. In 1947, the index of the volume of purchased fuel and electricity consumed was only 168. This appears to be evidence of the greater utilization of capacity and technological progress. A counteracting influence was the gain in pulp made for export, which resulted in a drop in proportion of the quantity available for further processing in Canada.

The **printing and publishing** industries expanded very little during the war years. In 1944, output was only about 15 per cent greater than in the base period. Production grew rapidly, however, after the end of hostilities and in 1951, volume of output was nearly double what it was in the five pre-war years.

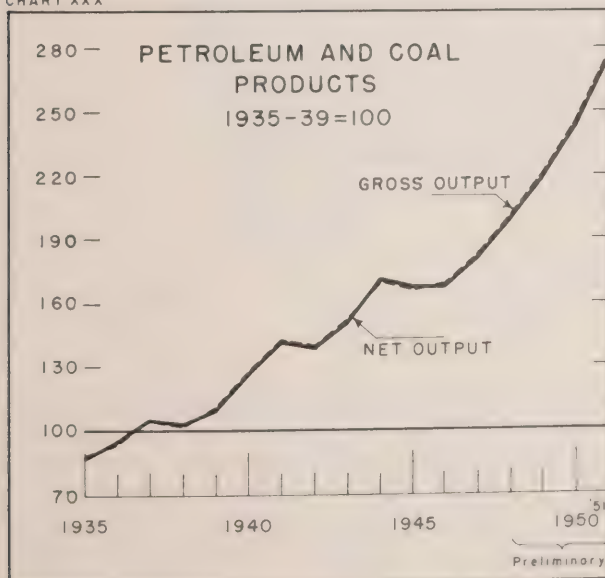
although this represents a substantially smaller advance than total manufacturing. The post-war increase coincided with the gain in the value of new investment which was mainly in the form of machinery and equipment to make up for deficiencies dating back to the depressed thirties and the war years. New investment intentions for 1952 show a considerable drop from the 1951 record expenditure of nearly \$24 million: they amount to only \$12.5 million.

CHART XXIX



With few interruptions, output of **petroleum and coal** products rose steadily over the period under review to an index maximum of 275 in 1951. Although production of **coke** failed to exceed its record wartime volume, **petroleum refining**, as the result of

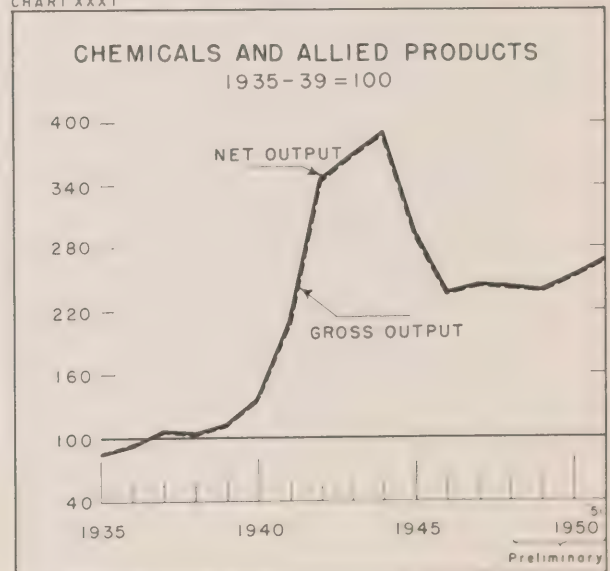
CHART XXX



record-breaking post-war demand for gasoline and fuel oils, showed a marked expansion. In 1951, the production index stood at 321 compared with a wartime high of 170 in 1944. In recent years, the industry has added substantially to its refining capacity. From 1947 to 1951, expenditures for new plant, machinery and equipment averaged more than \$37 million a year. Intentions for 1952 amount to a record-breaking \$79 million. Some of this rapid growth is associated with the remarkable progress made in the exploitation of western crude oil reserves. In 1951, oil from domestic wells represented 38 per cent of the total consumed by Canadian refineries. This compared with a contribution of 27 per cent in 1950 and 22 per cent in 1949.

Output of **chemical products** which include ammunition and explosives reached a record-high level in 1944 when the index stood at 390. Production in the post-war period has been at a considerably lower level, but increased significantly in 1950 and 1951 with the advent of the defence programme. The expansion of the industry during the war made possible the manufacture of many products which were formerly imported. In addition, several entirely new products, such as synthetic rubber, were introduced. Demand for these commodities continued in the post-war period and the development of new sources of basic materials, together with the progress of research into additional commercial uses for these new compounds resulted in further expansion of production for civilian use.

CHART XXXI



The rapid wartime advance was mainly the result of the enlargement of the munition programme with the government and private industry combining forces in the construction of a huge explosives and ammunition-filling industry. At its peak in 1943, the production index for **explosives and ammunition** was



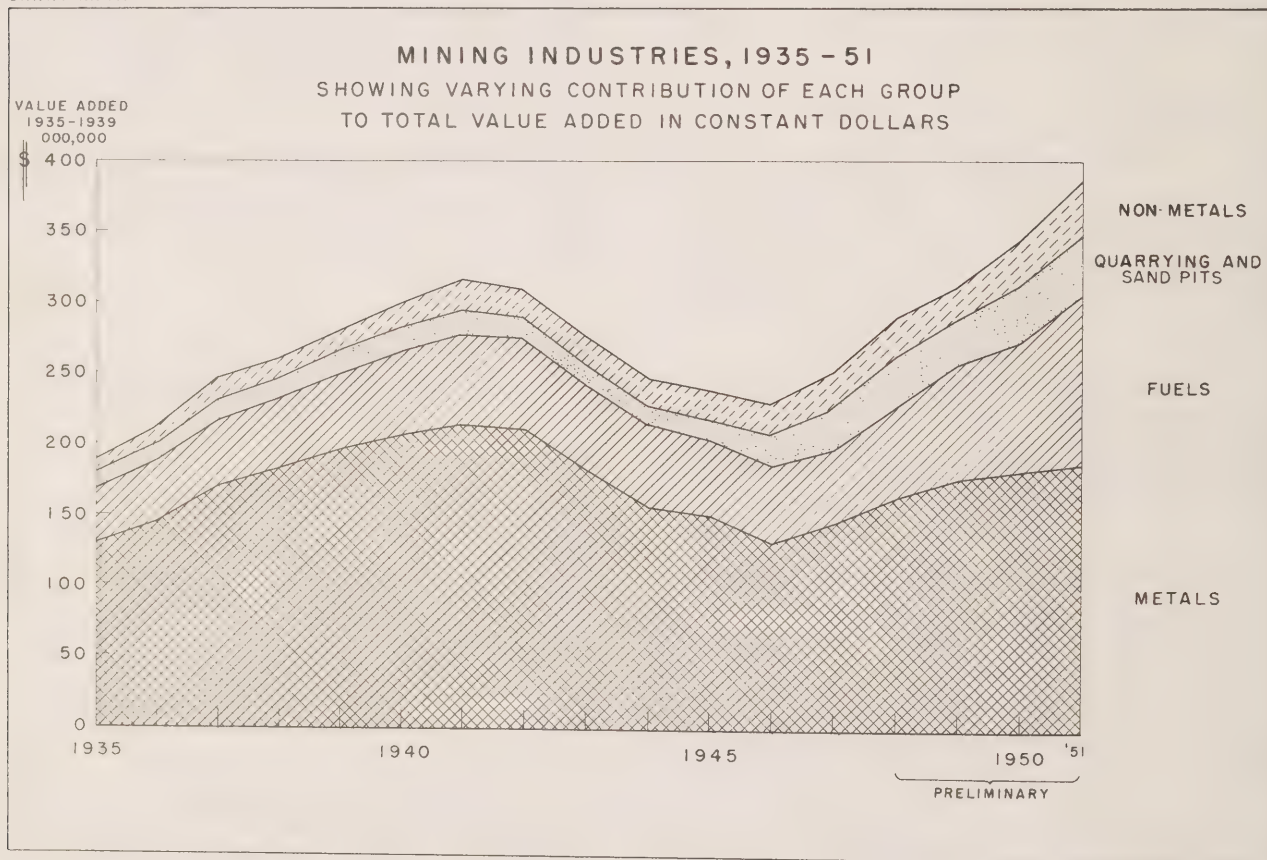
20 times higher than in the base period. Output dropped very rapidly after the end of the war and in 1946 the index was down to 107.

In the post-war period, the most important industries in the chemicals group have been **fertilizers, medicinal and pharmaceutical preparations, paints and varnishes and acids, alkalies and salts.** Together, these industries account for more than one-half the net value of the group. A feature was the marked increase in production of fertilizers. In 1947, output was more than five times what it was in the base period, declining to a moderately lower level in succeeding years. The index of gross output in this industry is probably distorted because of the large amount of duplication (the products of some firms being used as materials by others) and is therefore not strictly comparable with the net index which is free of double-counting. Production of

paints and varnishes expanded throughout the period, the high level of output being sustained in the post-war years by the boom in construction activity. The index in 1950 and 1951 stood at a record 252.

Since the Government-owned Polymer Corporation began producing **synthetic rubber** in 1943, output of this important commodity has expanded considerably. Production declined somewhat in 1947 and 1948 when imports of natural rubber were resumed, but recovered strongly to record levels in 1950 and 1951 as the defence programme gathered momentum and as the rubber requirements of the motor vehicles industry rose to a new maximum. During 1951, synthetic rubber accounted for 37 per cent of total new rubber consumed in Canada. This commodity is classified to the "**Miscellaneous Chemicals**" industry.

CHART XXXII



### Mining.

The development of promising mineral discoveries in recent years is an integral part of Canada's industrialization programme. New investment in primary mining industries in the post-war period has exceeded all previous levels. Substantial discoveries of oil, natural gas and iron ore have attracted the most attention. However, new discoveries of copper,

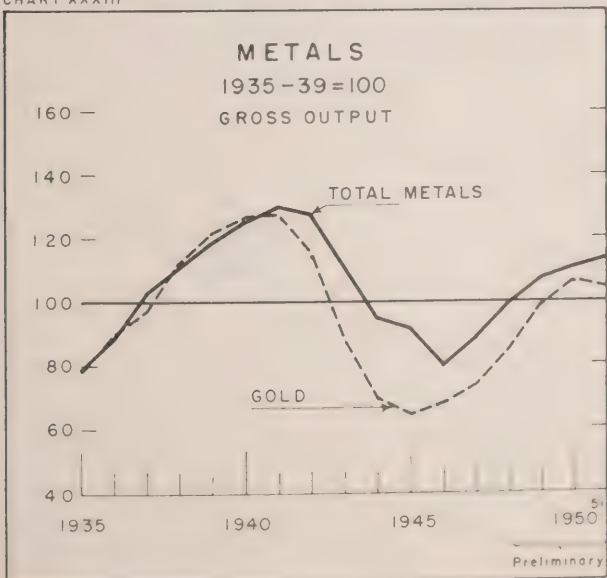
nickel, zinc, titanium and asbestos have also been made. In addition, large sums have been spent on the expansion and modernization of existing mines. The overall volume of minerals output attained a wartime peak in 1941 when the production index stood at 132. Principally because of the steady recession in the mining of gold and other principal metals during the next five years, the index gradu-

ally declined and reached a ten-year low point of 97 in 1946. Since then, sharp gains in the production of petroleum and other non-metals, together with a moderate increase in metals output, resulted in a sustained advance to a record high level of 162 in 1951.

After reaching a maximum of 130 in 1941, the **metals** index dropped steadily to 80 in 1946, chiefly because of the fact that gold production was reduced from 5,345,179 fine ounces in 1941 to 2,696,727 fine ounces in 1945, a decline of nearly 50 per cent. Gold output rose gradually in the post-war period, and in 1951, 4,364,309 fine ounces were produced. Pressing war demands led to early production peaks for copper, nickel and lead. As armament needs became less urgent, production of these essential metals declined until post-war civilian demand, together with the defence-preparedness programme, resulted in a reversal of the downward trend. Nineteen-forty was the year of greatest copper output when 655 million pounds were mined. Due in large part to a shortage of labour, production declined steadily thereafter to the lowest point of the period under review in 1946, when only 368 million pounds were produced. However, output rose gradually in the following years and in 1951 a total of 539 million pounds were extracted.

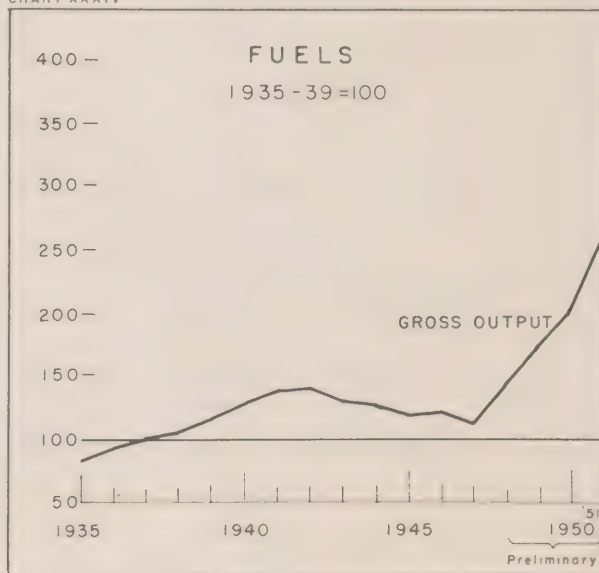
Production of nickel, the important use of which is in the manufacture of high strength alloy steel, kept rising until 1943. In the succeeding three years, output dropped one-third, but by 1951 the industry was again producing at about its average wartime rate. Lead production reached a record level in 1942 as a result of demand for war requirements and the fact that lead was used at that time as a substitute for more critical materials. Output dropped considerably in 1943 and 1944, and since then has not shown any marked tendency to recover from this lower level.

CHART XXXIII



Zinc was also used extensively in war production, and reached a high wartime level of output in 1943. Thereafter, production declined steadily until 1947 after which a considerable upward trend developed. It was not until after the war that the mining of iron ore reached significant proportions. No ore has yet been shipped from the huge new deposits near the Quebec-Labrador boundary, but expansion of operating mines, especially in Ontario, has resulted in a considerable increase in production. Though deposits of iron are widespread throughout Eastern Canada and British Columbia, few have been found of sufficient purity and size to meet the requirements of modern industry; so few, in fact, that from 1924 until 1939 no iron ore was produced in Canada. Since 1939, outside of Newfoundland, the principal producing properties have been those north of Lake Superior and the Steep Rock Mine near Port Arthur. Much of this ore, which is quite high grade, is being exported to the United States in exchange for ores that can be used to greater advantage in Canadian furnaces.

CHART XXXIV

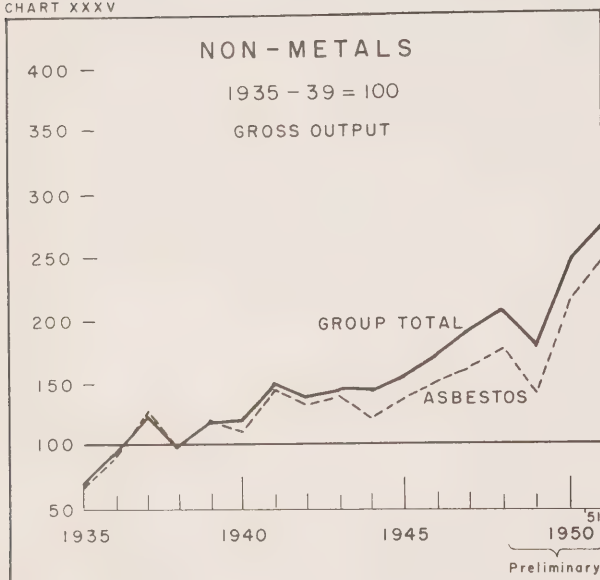


Production of **fuels** attained a wartime peak in 1942 when the index stood at 141. As a result of declines in the output of coal and petroleum, the index dropped steadily until 1947 when it registered 113. The spectacular oil and gas discoveries in Alberta and the ensuing development of the rich properties reversed the downward trend and by 1951, the index had reached the record level of 259. From 1948 to 1951, output of Canadian oil wells rose four-fold. Shipments of natural gas advanced 34 per cent in the same comparison; construction of additional distribution facilities now under way will result in further marked gains in shipments of Alberta gas. After reaching a high volume of activity in 1942, coal-mining receded somewhat in the following five years, but has since regained its early wartime rate of output. While large deposits of coal occur in



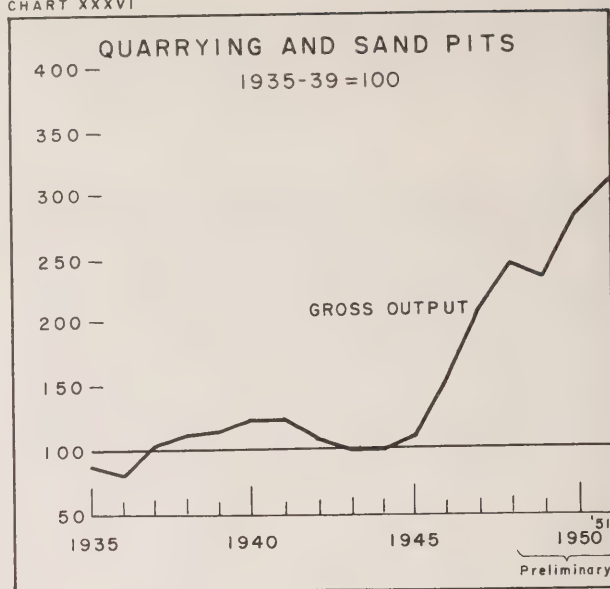
Eastern and Western Canada, none is mined in Ontario and Quebec, where the majority of manufacturing industries and the densest population are located. Hence coal is brought into these central provinces, chiefly from the United States. The post-war increase in coal production has failed to keep pace with booming industrial demand so that, while in 1938, Canadian coal accounted for 54 per cent of domestic needs, output in 1951 represented only 41 per cent of consumption. Imports more than doubled in the same comparison.

CHART XXXV



The post-war boom in construction both in Canada and the United States resulted in marked increases in output of **other non-metals** and **quarrying**. In 1945 the volume index for "Other Non-metals" was 153. By 1951 it had advanced to 271, representing a gain of 77 per cent. In the same period the volume of sand, stone and gravel quarried increased 186 per cent. The bulk of Canadian asbestos production and a large portion of gypsum output are exported, chiefly to the United States. The former is used largely in the manufacture of building materials and in motor vehicle brake linings and clutch facings. Gypsum is converted mostly into plaster, wallboard and lath. Production of other non-metals, such as salt, feldspar, graphite, sodium sulphate, etc., also rose considerably.

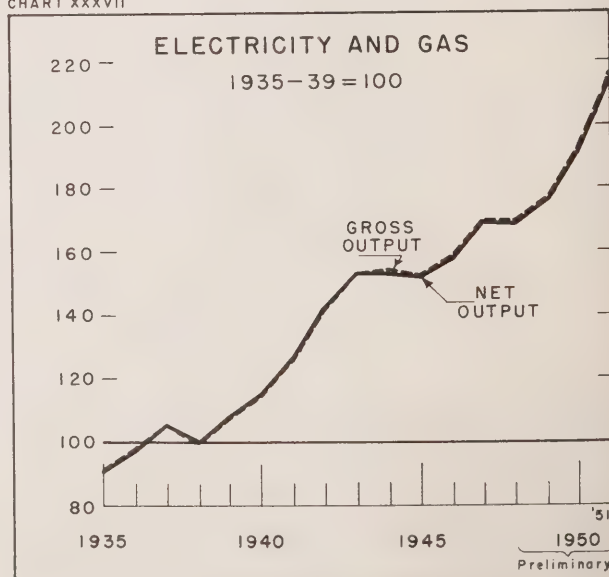
CHART XXXVI



### Electricity and Gas.

The movement of output in this sector is influenced mainly by electric power. Production of manufactured gas represents only about 8 per cent of the combined value. Electric power in Canada is virtually synonymous with water power. Although electricity produced in thermal plants is important to various municipalities where hydro-electric power is not available, it amounts to only a negligible proportion of total production.

CHART XXXVII



Keeping pace with the increase in output of Canadian factories and mines, production of electric energy more than doubled since immediate pre-war years. In 1951 the volume index stood at 218. Forty-two per cent of this increase has occurred since 1945. In Canada, the large industrial consumers are the pulp and paper industry, the smelting and refining industry, and the primary iron and steel industry. The adequate supply of hydro-electric power has

been an important factor in the rapid development of Canada's industrialization programme. The total installed capacity of water wheels and turbines is now listed at 13,341,000 h.p. This is a gain of 61 per cent over 1939 and represents but 24 per cent of known resources. New plants and extensions to existing stations which are under construction or planned for operation before 1956 will add an additional 3.4 million h.p. to Canadian capacity.





**APPENDIX A**  
**Select Bibliography**





## APPENDIX A

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**APPENDIX B**  
**Description of Indexes**





**APPENDIX B**  
**DESCRIPTION OF INDEXES**  
**I — Manufacturing Indexes**  
(a) Annual Indexes

Industry or Group	Weight 1935-39	Types of Indicator 1947	Number of Items 1947		Percentage of Coverage			
					Products		Materials	
			Products	Materials and Fuel	1935-39	1947	1935-39	1947
<b>Foods and Beverages .....</b>	<b>19.059</b>							
<b>Total Foods .....</b>	<b>14.892</b>							
Meat Products .....	2.198							
Slaughtering and Meat-Packing <sup>1</sup> .....	2.138	Net	52	43	95	86	98	98
Animal Oils and Fats .....	.007	Gross	7		77	83		
Sausage and Sausage Casings .....	.053	Net	6	17	64	79	77	84
Dairy Products <sup>2</sup> .....	1.471							
Butter and Cheese .....	1.035	Net	24	16	99	99	98	98
Condensed Milk .....	.220	"	25	11	100	99	98	93
Process Cheese .....	.115	"	6	24	82	95	81	92
Other Dairy Products .....	.101	"	6	32	91	98	92	90
Canning and Preserving .....	2.097							
Fish Curing and Packing .....	.713	Net	228	88	100	99	100	99
Fruit and Vegetable Preparations .....	1.384	"	104	109	100	99	95	93
Grain Mill Products .....	2.296							
Flour and Feed Mills .....	1.604	Net	29	22	100	100	99	99
Foods, Breakfast .....	.492	"	11	33	100	98	100	97
Feeds, Stock and Poultry .....	.200	"	44	59	96	100	98	96
Bread and Bakery Products <sup>3</sup> .....	2.545	Net		66			96	94
Miscellaneous Foods .....	4.285							
Biscuits and Confectionery .....	1.818	Net	32	51	96	96	89	93
Sugar Refineries .....	.878	"	9	25	100	100	99	99
Malt Mills .....	.205	"	10	23	100	100	99	99
Macaroni, Vermicelli, Etc. ....	.052	"	5	25	100	98	100	98
Starch and Glucose .....	.186	"	12	24	100	95	94	89
Rice Mills .....	.026	"	3	3	100	99	99	99
Miscellaneous Foods, (Tea, Coffee, Etc.) .....	1.120	"	87	96	99	97	99	98
<b>Total Beverages .....</b>	<b>4.167</b>							
Aerated and Mineral Waters .....	1.086	Net	8	19	98	100	94	92
Distilleries <sup>4</sup> .....	1.064	"	16		100	99		
Breweries .....	1.892	"	8	32	100	100	99	99
Wine <sup>5</sup> .....	.125	"	6	29	100	100	99	96
<b>Tobacco and Tobacco Products .....</b>	<b>1.771</b>							
Tobacco, Cigars and Cigarettes .....	1.581	Net	11	22	100	100	100	100
Tobacco Processing and Packing .....	.190	"	6	14	99	100	100	100
<b>Rubber Products<sup>6</sup> .....</b>	<b>2.786</b>	Net	101	40	99	95	86	86
<b>Leather Products .....</b>	<b>2.309</b>							
Boots and Shoes, Leather .....	1.301	Gross	36		100	100		
Gloves and Mittens, Leather .....	.132	Net	9	19	100	98	80	78
Leather Tanneries .....	.553							
Leather Tanneries .....	.528	Gross	24		95	93		
Belting Leather .....	.025	Net	3	11	89	83	88	86
Miscellaneous Leather Products .....	.323							
Boot and Shoe Findings, Leather .....	.056	Gross	9		62	84		
Miscellaneous Leather Goods .....	.267	"	30		79	78		
<b>Textile Products (Ex. Clothing) .....</b>	<b>5.658</b>							
Cotton Goods .....	2.223							
Cotton Thread .....	.144	Materials		7			88	95
Cotton Yarn and Cloth .....	2.005	Net	65	33	99	97	89	93
Cotton Batting and Wadding .....	.029	Man-hours			100			
Cotton and Wool Waste .....	.045	Gross	10		100	95		
Woolen Goods .....	1.139							
Woolen Cloth .....	.639	Materials		40			31	86
Woolen Yarn .....	.272	Net	20	41	96	87	92	92
Woolen Goods, n.e.s. ....	.228	"	35	38	99	82	91	85
Synthetic Textiles and Silk <sup>8</sup> .....	1.127	Gross	15		96	95		
Other Textile Products .....	1.169							
Dyeing and Finishing of Textiles .....	.149	Gross	11		86	72		
Other Cotton Textiles .....	.125	Materials		22			86	86
Narrow Fabrics <sup>9</sup> .....		"		18				81
Awning, Tents and Sails .....	.067	Man-hours						
Carpets, Mats and Rugs <sup>10</sup> .....	.163	Net	13	21	90	83		85
Cordage, Rope and Twine .....	.175	"	18	23	97	95	93	98
Cotton and Jute Bags .....	.136	Materials		10			100	96
Miscellaneous Textiles .....	.331	Gross	21		90	95		
All other Textile Industries (Linen) .....	.023	"	6		100	100		



## I - Manufacturing Indexes - Continued

(a) Annual Indexes - Continued

Industry or Group	Weight 1935-39	Types of Indicator 1947	Number of Items 1947		Percentage of Coverage			
					Products		Materials	
			Products	Materials and Fuel	1935-39	1947	1935-39	1947
<b>Clothing (Textile and Fur) .....</b>	<b>7.107</b>							
Men's, Women's and Children's Clothing .....	4.006							
Clothing, Men's Factory .....	2.080	Gross	143		98	98		
Clothing, Women's Factory .....	1.789	"	164		95	91		
Clothing Contractors .....	.137	Man-hours						
Hosiery and Knitted Goods .....	1.887	Net	135	62	98	97	89	90
Miscellaneous Clothing .....	1.214							
Corsets .....	.179	Gross	20		84	95		
Fur Goods .....	.422	"	17		73	80		
Fur Dressing and Dyeing .....	.083	Man-hours						
Hats and Caps <sup>11</sup> .....	.473	Gross	36		96	94		
Oiled and Waterproofed Clothing .....	.036	"	23		90	84		
Gloves and Mittens, Fabric .....	.021	"	11		100	95		
<b>Wood Products .....</b>	<b>5.940</b>							
Saw and Planing Mills .....	3.752							
Sash, Door and Planing Mills .....	.766	Materials		5			86	91
Flooring, Hardwood <sup>12</sup> .....	.091	Net	15	16		84	97	98
Sawmills .....	2.895	"	51	15	98	100	99	97
Veneer and Plywood <sup>13</sup> .....		Cost of Production						
Furniture .....	1.266							
Furniture .....	.972	Man-hours						
Mattresses and Springs .....	.294	"						
Miscellaneous Wood Products .....	.922							
Boxes and Baskets, Wooden .....	.292	Materials		8			84	87
Coffins and Caskets .....	.109	Gross	7		89	91		
Cooperage .....	.060	"	26		85	89		
Excelsior .....	.010	"	3		97	81		
Lasts, Trees and Shoe Findings .....	.061	Man-hours						
Woodenware <sup>14</sup> .....	.053	Value Deflated						
Wood Turning .....	.080	Man-hours						
Beekeepers' and Poultrymen's Supplies <sup>14</sup> .....	.009	Value Deflated						
Wood Preservation .....	.094	Man-hours						
Miscellaneous Wood Products .....	.154	"						
<b>Paper Products .....</b>	<b>8.701</b>							
Boxes and Bags, Paper .....	.854	Materials		18			86	86
Pulp and Paper .....	6.896	Net	40	78	100	100	92	94
Roofing Paper .....	.211	"	12	22	93	92	80	86
Miscellaneous Paper Products .....	.611	Gross	106		82	72		
Wallpaper <sup>15</sup> .....	.129	Materials		6				60
<b>Printing, Publishing and Allied Trades .....</b>	<b>5.996</b>							
Printing and Bookbinding <sup>16</sup> .....	1.681	Materials		9				100
Trade Composition .....	.047	Man-hours						
Printing and Publishing <sup>16</sup> .....	3.417	Materials		9				99
Engraving, Stereotyping and Electrotyping .....	.430	Man-hours						
Lithographing <sup>16</sup> .....	.421	Materials		9				100
<b>Iron and Steel Products .....</b>	<b>11.417</b>							
Agricultural Implements .....	.651	Gross	96		59	75		
Boilers and Platework .....	.386	Man-hours						
Bridge and Structural Steel Work .....	.490	Materials		6			84	83
Hardware, Tools and Cutlery .....	.950	Man-hours						
Heating and Cooking Apparatus .....	.638	Gross	45		80	67		
Castings, Iron .....	1.428	Net	35	57	62	69	78	79
Machinery .....	2.066							
Machinery .....	2.043	Man-hours						
Refrigerators, Other than Electric .....	.023	"						
Machine Shops <sup>17</sup> .....	.191	"						
Primary Iron and Steel .....	2.396	Net	48	70	96	90	90	92
Sheet Metal Products .....	1.358	Materials		28			87	81
Wire and Wire Goods <sup>18</sup> .....	.666	Net	30	20	76	66	92	88
Miscellaneous Iron Products <sup>19</sup> .....	.197	Gross and Man-hours	23					
<b>Transportation Equipment .....</b>	<b>6.749</b>							
Aircraft <sup>20</sup> .....	.256	Man-hours						
Bicycles .....	.057		5		84	85		
Boats and Canoes .....	.059	Gross						
Motor Vehicles .....	2.651	Man-hours						
Motor Vehicle Parts .....	1.241	Gross	9		92	83		
Automobile Parts and Supplies .....	1.211	Man-hours						
Automobile Accessories, Fabric .....	.030	"						
Railway Rolling-Stock .....	2.012	"						
Shipbuilding and Repairs <sup>21</sup> .....	.442	"						
Carriages, Wagons and Sleighs .....	.031	"						

## I — Manufacturing Indexes — Continued

## (a) Annual Indexes — Continued

Industry or Group	Weight 1935-39	Types of Indicator 1947	Number of Items 1947		Percentage of Coverage			
			Products	Materials and Fuel	Products		Materials	
					1935-39	1947	1935-39	1947
<b>Non-ferrous Metal Products .....</b>	<b>7.600</b>							
Aluminum Products .....	.159	Net	6	21				
Brass and Copper Products .....	.801	"	40	64	66	72	90	83
Jewellery, Electro-plated Ware, Etc. ....	.446	Man-hours						
Smelting and Refining .....	5.899	Gross	24		100	100		
White Metal Alloys .....	.216	"	36		76	99		
Miscellaneous Non-ferrous Metal Products .....	.079	Man-hours						
<b>Electrical Apparatus and Supplies<sup>21</sup> .....</b>	<b>3.432</b>	Gross and Man-hours	83					
<b>Non-metallic Mineral Products .....</b>	<b>2.632</b>							
Abrasive Products .....	.471	Net	7	39	77	69	87	77
Asbestos Products <sup>22</sup> .....	.058	Gross, Materials and Man-hours	10	11	91			
Cement .....	.407	Gross	1		100	100		
Cement Products <sup>23</sup> .....	.100	Net	9	16		79	78	86
Clay Products .....	.387							
Domestic .....	.235	Gross	14		75	76		
Imported .....	.144	Man-hours						
Sand-Lime Brick .....	.008	Gross	2		93	99		
Glass Products <sup>24</sup> .....	.492	Net, Materials and Man-hours	4	14				
Lime and Gypsum Products .....	.288							
Lime .....	.191	Gross	2		100	100		
Gypsum Products .....	.097	Net	4	16	94	94	88	94
Stone, Monumental and Ornamental .....	.163	Man-hours						
Miscellaneous Non-metallic Mineral Products <sup>25</sup> .....	.209	Net	27	38	92	86	75	82
Salt <sup>26</sup> .....	.077	Gross	4		100	100		
<b>Products of Petroleum and Coal .....</b>	<b>1.872</b>							
Coke and Gas Products <sup>27</sup> .....	.579	Net	13	16	100	100	99	98
Petroleum Products .....	1.293	Gross	31		100	99		
<b>Chemicals and Allied Products .....</b>	<b>5.742</b>							
Acids, Alkalies and Salts .....	.962	Net	87	77	98	94	85	84
Explosives and Ammunition <sup>28</sup> .....	.482	Gross	9		93	90		
Fertilizers .....	.210	Net	14	34	100	97	95	91
Medicinal and Pharmaceutical Preparations .....	1.145	Man-hours						
Paints, Pigments and Varnishes .....	.901	Net	26	107	98	96	93	91
Soaps and Washing Compounds .....	.602	"	35	51	93	74	91	84
Toilet Preparations .....	.304	Man-hours						
Vegetable Oil Mills .....	.062	Net	14	21	100	96	100	99
Plastics <sup>29</sup> .....	.120	Man-hours			82			
Miscellaneous Chemicals .....	.954							
Inks, Printing and Writing .....	.138	Gross	8		78	88		
Adhesives .....	.067	Net	20	29	87	93	70	72
Polishes and Dressings .....	.107	Gross	7		51	64		
Coal Tar Distillation .....	.083	"	12		96	89		
Compressed Gases .....	.221	Net	9	15	100	100	85	75
Wood Distillation .....	.020	Gross	5		100	100		
Miscellaneous Chemicals <sup>30</sup> .....	.180	Gross and Man-hours	37					
Charcoal .....	.003	Gross	1		100	100		
Disinfectants .....	.011	Wage-earners						
Boiler Compounds .....	.021	Man-hours						
Sweeping Compounds .....	.004	"						
Matches .....	.062	Gross	2		100	100		
Insecticides .....	.037	"	8		70	73		
<b>Miscellaneous Manufacturing Industries .....</b>	<b>1.209</b>							
Brooms, Brushes and Mops <sup>31</sup> .....	.159	Gross						
Musical Instruments .....	.041	"	7		80	61		
Fountain Pens and Pencils .....	.084	"	21		84	89		
Typewriter Supplies .....	.038	"	19		99	98		
Scientific and Professional Equipment <sup>32</sup> .....	.288	Gross and Man-hours	10		89			
Sporting Goods .....	.077	Gross	47		83	64		
Toys .....	.035	Man-hours						
Buttons, Buckles and Fasteners .....	.068	Gross	15		85	56		
Candles .....	.023	"	30		90	71		
Ice, Artificial .....	.108	"	1		87	90		
Pipes, Tobacco .....	.002	"	4		77	77		
Signs, Electric and Other .....	.123	Man-hours						
Stamps and Stencils .....	.034	"						
Umbrellas .....	.013	Gross	1		98	92		
Artificial Flowers .....	.024	Man-hours						
Hair Goods, Animal and Human .....	.002	Gross	21		92	63		



**I — Manufacturing Indexes — Concluded**  
(a) Annual Indexes — Concluded

Industry or Group	Weight 1935-39	Types of Indicator 1947	Number of Items 1947		Percentage of Coverage			
					Products		Materials	
			Products	Materials and Fuel	1935-39	1947	1935-39	1947
<b>Miscellaneous Manufacturing Industries—Concluded</b>								
Other Miscellaneous Manufacturing Industries.....	.090	Man-hours						
Statuary, Art Goods and Novelties.....	.052							
Store and Display Accessories.....	.004							
Jewellery Cases.....	.015							
Regalia and Society Emblems.....	.005	Gross Man-hours						
Lamps, Electric <sup>33</sup> .....	.008		6			87		
All other Industries.....	.006							
<b>Total Manufacturing Industries.....</b>	<b>100,000</b>		<b>3,074</b>	<b>2,213</b>				

1. As original products data in this industry were factory sales, an adjustment for changes in cold storage holdings of meats was applied.
2. Does not include fluid milk and cream. These items were removed from the products and the materials data, according to the Standard Classification of Industries. The series is therefore not comparable with the other principal statistics of the industry. The process cheese industry was not included in the census of manufactures prior to 1938. Value added in 1935-1937 was estimated from production data collected separately.
3. The products component was computed by adding the volume aggregate of bread to an estimated volume aggregate for cake and other bakery products. The volume of materials used in the production of cake and other bakery products was obtained by subtracting from the total materials aggregate the volume of materials used in the production of bread (estimated from a bread formula). The resulting materials index for cake and other bakery products was used to project the base-period value of production of these commodities. It was thus assumed that the materials and products indexes for this section of the industry were identical.
4. Materials were computed in three sections and added: (a) Due to the use of substitute materials during the war period, the levels of the volume of materials in 1935-39 and in 1947 in the production of new spirits were computed directly and the levels in intervening years were established by applying the year-to-year changes in the volume of production of the new spirits and adjusting for differences in the levels of the benchmarks; (b) The materials (matured liquors) used in the preparation of marketable liquors were expressed as an aggregate by applying the base-period "prime costs" and cost of imports to the gallonage prepared; (c) The volume aggregate of matured liquors purchased for further processing. The duplication arising from the use of matured liquors is also present in the products section.
5. Industry treated essentially the same as distilleries: duplication of matured wine in the bottling process of the products section was also introduced into the materials section by the application of "prime cost" to gallonage bottled.
6. The products component is made up of three separate sections: (a) Tires and tubes: numbers of tires and tubes produced for period 1935-39; value of tires and tubes deflated with price index for period 1939-1943; rubber consumed in the production of tires and tubes for period since 1943. (b) Footwear, (c) All other products.
7. Products used up to and including 1942.
8. Production series for yarn and fabric were computed separately and weighted with estimated figures of value added for each section.
9. New industry in 1940; products previously classified to other textile and clothing industries. Index "spliced in" in 1940. Man-hours used to indicate production from 1940 to 1946.
10. Gross output indicator used up to 1941.
11. Duplication of hat bodies and hat linings removed.
12. Materials indicator used up to 1943.
13. New industry in 1944; products previously classified to other wood-using industries. Indexes of average hourly earnings and unit values of materials were weighted and used to deflate gross value of production. Resulting index was "spliced in" in 1944.
14. Value of products deflated with unit value index based on "Cooperage" industry.
15. Wage-earners used up to 1946.
16. For period 1935-1946, materials aggregate obtained by deflating the values of the various categories of paper used with unit value indexes derived from "Pulp and Paper" industry.
17. New industry in 1941, not previously covered. For period 1935-1941 levels assumed to be the same as for remainder of the "Iron and Steel" industry. Weight in base period obtained by applying to estimated number of wage-earners in the base period, the average value-added per wage-earner of the other "Iron and Steel" industries.
18. Net output indicator only was constructed. Because of the large amount of duplication, no significant "gross" index could be obtained.
19. About two-thirds of the industry is based on man-hours in 1947. The sections for which measurable products were available were computed separately and combined with the man-hour section according to "value-added" contribution. From 1941 to 1945, output for man-hour ratios in those firms producing munitions whose volume of output was measurable were applied to the man-hours data of other munition-making establishments.
20. Census data was supplemented with Munitions and Supply delivery statistics during the war period. Productivity ratios were obtained for those firms producing standardized planes and ships and applied to man-hour totals of the other establishments where output was of a heterogeneous nature. The value of ship repairs was deflated with an index of average hourly earnings based on census data for the industry, and combined with remainder of "Shipbuilding and Repairs" according to value added relationships. The data for both the shipbuilding and aircraft industries were adjusted each year for changes in the value of work in process by converting work in process for each firm into equivalent ships and aircraft.
21. Industry divided into five sections from 1946. The radio, battery and appliance sections were constructed from product data. Man-hours were used for the remainder of the industry which includes heavy and miscellaneous apparatus.
22. Of the total net value about 15 per cent is deflated with appropriate wholesale price index, 55 per cent is represented by volume of materials consumed and the remainder is based on man-hours. Each section was individually weighted with value added.
23. Volume of materials indicator used for period 1935-1940.
24. Of the total net value, approximately 60 per cent is represented by volume of materials, 20 per cent by volume of net output and the remainder by man-hours. Each section was individually weighted with value added. In accordance with the Standard Classification of Industries, firms in which the main products optical glass, were transferred to the "Scientific and Professional Equipment" industry from 1940. Indexes were linked in the latter year.
25. For period 1935-1940 establishments producing peat moss were transferred to the mining industry.
26. The processing part of the industry only was included in manufacturing. That section of the industry which transfers the brine intact to other industries was classified to mining. The value added weights of the two sections were estimated from gross value relationships.
27. Those establishments the main product of which is manufactured gas for sale as such were transferred to the "Electricity and Gas" division.
28. During the war period, Census of Industry data were supplemented with Munitions and Supply material. Detailed figures of output on most categories of shells, cartridges, small arms ammunition and components together with contract unit values of finished munitions and their components were available from M and S records. For this section of the industry it was possible from this information to derive "net" unit values for the main categories of ammunition. The explosives section of the industry was computed separately and combined with the ammunition section by means of value added weights for the two groups of establishments.
29. Includes secondary plastic products. Man-hours for secondary and primary plastics are weighted with value added and combined. Measurement is based on products up to 1940 and man-hours were used thereafter.
30. About 30 per cent of the industry is represented by volume data on products. The remainder is based on man-hours.
31. Unit value indexes were computed for brooms, brushes and mops from quantity and value data for establishments producing relatively homogeneous items. These were then used to deflate the value of production of each section of the industry.
32. Man-hours account for about 85 per cent of the industry in 1947. Volume of products was used up to 1940.
33. Man-hours used prior to 1940.

I — Manufacturing Indexes  
(b) Monthly Indexes

Industry or Group	Industry Weights based on 1935-39	Commodity Weights	Unit of Measurement	Percentage of Coverage of Represented Items: 1949 Census Data	Type of Indicator and Description of Series	Source of Data
<b>Foods and Beverages</b> .....	<b>19.059</b>					
Meat Products .....	2.198	100.000		93		
Cattle .....		44.252	'000 Lbs.		Materials — Dressed weight of animals slaughtered at inspec- ted establishments Production in the Meat Packing Indus- try	Department of Agricul- ture
Calves .....		5.748	"			
Sheep and Lambs .....		2.281	"			
Hogs .....		38.869	"			
Lard .....		2.007	"			
Shortening .....		4.699	"			
Margarine .....		2.144	"			D.B.S. — Industry and Merchandising Divi- sion
Dairy Products .....	1.471	100.000		92		
Creamery Butter .....		40.014	'000 Lbs.		Production	D.B.S. — Agriculture Division
Factory Cheese .....		10.838	"			
Ice Cream .....		25.358	'000 Gal.			
Evaporated Milk .....		10.702	'000 Lbs.			
Condensed Milk .....		1.432	"			
Skim Milk Powder .....		2.590	"			
Milk Powder .....		1.227	"			
Process Cheese .....		7.839	"			
Canning and Preserving .....	2.097				Man-hours	D.B.S. — Labour and Prices Division
Fruit and Vegetable Preparations .....	1.384					
Fish Curing and Packing .....	.713		Cwt.	81	Materials — Landed weight of 27 varie- ties of sea fish in- dividually valued at 1948 prices	D.B.S. — Industry and Merchandising Divi- sion
Grain Mill Products .....	2.296					
Flour and Feed Mills .....	1.604	100.000		96		
Wheat Flour .....		54.500	Barrels		Production	D.B.S. — Agriculture Division
Millfeed .....		8.875	Tons			
Oatmeal .....		1.125	'000 Lbs.			
Rolled Oats .....		13.312	"			
Corn Flour and Meal .....		2.938	"			
Ground Feed .....		19.250	"			
Stock and Poultry Feeds .....	.200		Index 1950=100	96	Shipments — Volume index based on 88% sample survey of 17 varieties of feeds	D.B.S. — Industry and Merchandising Divi- sion
Breakfast Foods .....	.492				Man-hours	D.B.S. — Labour and Prices Division
Bread and Bakery Products .....	2.545				Man-hours	D.B.S. — Labour and Prices Division
Miscellaneous Foods .....	4.285					
Sugar Refineries .....	.878		'000 Lbs.	97	Production—Refined Sugar	D.B.S. — Agriculture Division
Biscuits and Confectionery .....	1.818				Man-hours	D.B.S. — Labour and Prices Division
Other Miscellaneous Foods .....	1.589				Man-hours	D.B.S. — Labour and Prices Division
Beverages .....	4.167					
Breweries .....	1.892		'000 Gals.	99	Production	Department of Nation- al Revenue
Distilleries .....	1.064	100.000		91		
New Spirits .....		18.662	'000 Gals.			
Spirits Bottled .....		81.338	"			
Wine .....	.125				Man-hours	D.B.S. — Labour and Prices Division
Aerated and Mineral Waters .....	1.086		Gallons	84	Production	D.B.S. — Industry and Merchandising Divi- sion
<b>Tobacco and Tobacco Products</b> .....	<b>1.771</b>	<b>100.000</b>		<b>100</b>		
Cigars .....		6.785	Thousands		Production	Department of Nation- al Revenue
Cigarettes .....		61.636	Millions			
Cut Tobacco .....		26.316	'000 Lbs.			
Plug Tobacco .....		3.868	"			
Snuff .....		1.395	Lbs.			
<b>Rubber Products</b> .....	<b>2.786</b>	<b>100.000</b>		<b>33</b>		
Tires, tubes and tire repair materials .....		55.029	'000 Lbs.		Materials — Natural, synthetic and reclaim rubber consumed in the production of items listed—Weights based on value of products	D.B.S. — Industry and Merchandising Divi- sion
Footwear (including heels, soles, etc.) .....		21.545	"			
Other Products (including wire and cable) .....		23.426	"			



## I - Manufacturing Indexes - Continued

## (b) Monthly Indexes - Continued

Industry or Group	Industry Weights based on 1935-39	Commodity Weights	Unit of Measurement	Percentage of Coverage of Represented Items: 1949 Census Data	Type of Indicator and Description of Series	Source of Data
<b>Leather Products .....</b>	<b>2,309</b>					
Boots and Shoes, Leather .....	1,301	100,000		99		
Men's .....		37,625	Pairs		Production	D. B. S.-Industry and Merchandising Divi- sion
Women's .....		45,875	"			
Boys' .....		3,932	"			
Youths' .....		617	"			
Misses' .....		4,241	"			
Children's and Little Gents' .....		3,470	"			
Babies' and Infants' .....		1,619	"			
Miscellaneous .....		2,621	"			
Leather Tanneries .....	.553	100,000		85		
Cattle Leather - Glove and Garment .....		2,355	Sq. Ft.		Production - Fin- ished Leather	D. B. S.-Industry and Merchandising Divi- sion
Cattle Leather - Bag, Case and Strap .....		4,710	Sides			
Cattle Leather - Harness .....		3,442	"			
Cattle Leather - Upper .....		27,174	'000 Sq. Ft.			
Cattle Leather - Sole .....		28,442	'000 Lbs.			
Calf and Kip Skin - Upper .....		22,102	'000 Sq. Ft.			
Sheep and Lamb - Shoe .....		7,609	Doz. Skins			
Sheep and Lamb - Glove and Garment .....		1,449	Skins			
Goat and Kid .....		2,717	Sq. Ft.			
Horse Hide - Glove and Garment .....						
Other Leather Products .....	.455				Man-hours	D. B. S.-Labour and Prices Division
<b>Textile Products (ex. Clothing) .....</b>	<b>5,658</b>					
Cotton Goods .....	2,223		'000 Lbs.	49	Materials - Volume Index of raw cotton bale openings (1935- 39=100)	Primary Textiles In- stitute
Woolen Goods .....	1,139	100,000		70	Shipments	
Woolen Fabric .....		45,951	'000 Linear Yds.		Shipments	
Worsted Fabric .....		27,465	"		Shipments	
Worsted Yarn .....		21,655	'000 Lbs.		Production	
Blankets .....		4,929	Number		Shipments	
Synthetic Textiles and Silk .....	1,127			65	Production	Primary Textiles In- stitute
Rayon and Nylon Fabrics .....			'000 Linear Yds.			
Other Textiles .....	1,169				Man-hours	D. B. S.-Labour and Prices Division
<b>Clothing (Textile and Fur) .....</b>	<b>7,107</b>					
Hosiery and Knitted Goods .....	1,887	100,000		93	Production: Weighted index (1950) of 9 types of hosiery	Primary Textiles In- stitute
Hosiery .....		48,043	Doz. Pair			
Knitted Goods .....		51,957			Man-hours	D. B. S.-Labour and Prices Division
Clothing (Men's, Women's and Children's) .....	4,006				Man-hours	
Hats and Caps .....	.473	100,000		n.a.	Production	Hat Research Foun- dation
Hat Bodies - Fur Felt .....		69,470	Dozen			
Wool Felt .....		30,530	"			
Other Clothing .....	.741				Man-hours	D. B. S.-Labour and Prices Division
<b>Wood Products .....</b>	<b>5,940</b>					
Sawmills .....	2,895	100,000		92		
Lumber .....		86,422	M ft. B.M.		Production	D. B. S.-Industry and Merchandising Divi- sion
Lath .....		.970	M			
Shingles .....		9,525	Squares			
Ties .....		3,083	Number			
Veneer and Plywood .....	.170 <sup>1</sup>	100,000		60		
Peeler Logs - softwood .....		50,588	M ft. B.M.		Materials	
hardwood .....		49,412	"			
Furniture .....	1,266				Man-hours	D. B. S.-Labour and Prices Division
Sash, Door and Planing Mills and Flooring .....	.857				Man-hours	
Other Wood Products .....	.922				Man-hours	

1. New industry in 1944. Products previously classified to other wood-using industries.

I — Manufacturing Indexes — Continued  
(b) Monthly Indexes — Continued.

Industry or Group	Industry Weights based on 1935-39	Commodity Weights	Unit of Measurement	Percentage of Coverage of Represented Items: 1949 Census Data	Type of Indicator and Description of Series	Source of Data
<b>Paper Products .....</b>	<b>8.701</b>					
Pulp and Paper .....	6.896	100.000		98		
Newsprint .....		46.517	Tons		Production	Newsprint Association of Canada
Building Papers .....		.844	"			
Building Boards .....		1.294	"			
Box Paperboard .....		5.598	"			
Container Paperboard .....		4.086	"			
Wrapping Paper .....		4.697	"		Export Shipments	Canadian Pulp and Paper Association
Tissue and Sanitary .....		1.803	"			
Book, Writing and Specialty .....		6.936	"			
Groundwood Pulp — mechanical .....		2.545	"			
Screenings — pulp .....		.102	"			
Sulphate — pulp .....		3.926	"		Production	D. B. S.—Industry and Merchandising Divi- sion
Unbleached sulphite pulp .....		10.397	"			
Bleached Sulphite-paper pulp .....		5.758	"			
Bleached Sulphite-dissolving pulp .....		5.497	"			
Roofing Paper .....	.211	100.000		76		
Mineral-surfaced Rolls .....		18.571	Squares		Production	D. B. S.—Industry and Merchandising Divi- sion
Smooth-surfaced Rolls .....		11.905	"			
Asphalt Shingles .....		47.143	"			
Tar and Asphalt Felts .....		13.333	Tons			
Tar and Asphalt Sheathings .....		5.238	"			
Asphalt Floor Tiles .....		3.810	Sq. Ft.			
Other Paper Products .....	1.594				Man-hours	D. B. S.—Labour and Prices Division
<b>Printing, Publishing and Allied Trades .....</b>	<b>5.996</b>					
Printing and Publishing .....	3.417			68		
Newsprint .....			Tons		Materials—Domestic shipments of news- print	Newsprint Association of Canada
Other Printing Trades .....	2.579				Man-hours	D. B. S.—Labour and Prices Division
<b>Iron and Steel Products .....</b>	<b>11.417</b>					
Agricultural Implements .....	.651				Man-hours	D. B. S.—Labour and Prices Division
Sheet Metal Products .....	1.358					
Bridge and Structural Steel Work .....	.490					
Hardware, Tools and Cutlery .....	.950					
Boilers and Plate Work .....	.386					
Machinery and Machine Shops .....	2.257				Production in the Heating and Cooking Apparatus Industry	D. B. S.—Industry and Merchandising Divi- sion
Heating and Cooking Apparatus .....	.638	100.000		61		
Warm Air Furnaces .....		17.904	Number			
Electric Ranges .....		26.452	"			
Solid Fuel Heating Stoves .....		2.212	"			
Refrigerators .....		14.732	"		Production in the Iron Castings Indus- try	D. B. S.—Industry and Merchandising Divi- sion
Cast Iron Radiators .....		5.688	"			
Solid Fuel Cooking Stoves .....		16.183	"			
Gas Heating Stoves .....		.690	"			
Combination Stoves — with Gas .....		3.216	"			
Combination Stoves — with Electricity .....		3.274	"		Production in the Iron Castings Indus- try	D. B. S.—Industry and Merchandising Divi- sion
Gas Cooking Stoves .....		9.649	"			
Iron Castings .....	1.428	100.000		66		
Grey Iron Castings .....		38.791	Tons		Production in the Iron Castings Indus- try	D. B. S.—Industry and Merchandising Divi- sion
Cast Iron Soil Pipe and Fittings .....		3.869	"			
Malleable Iron .....		11.239	"			
Malleable Iron Pipe Fittings .....		7.060	"			
Other Cast Iron Pipe and Fittings .....		12.926	"			
Steel Pipe (Galvanized and Not Galvanized) .....		17.861	"		Production	D. B. S.—Industry and Merchandising Divi- sion
Steel Tubing (Seamless and Light) .....		8.254	"			
Primary Iron and Steel .....	2.396	100.000		97		
Pig Iron .....		6.510	Tons		Production	
Ferro Alloys .....		9.170	"		Production	
Steel:					Production	
Steel Ingots .....		25.740	"		Production	
Steel Castings .....		4.890	"		Production	
Rolling Mills:					Shipments	D. B. S.—Industry and Merchandising Divi- sion
Blooms, billets and slabs .....		2.309	"		Shipments	
Bars .....		16.537	"		Production	
Structural Shapes .....		3.490	"		Production	
Wire Rods .....		4.671	"		Production	
Rails .....		4.725	"		Production	
Rail Fastenings (splice bars and tie plates) .....		1.181	"		Production and Ship- ments	
Plates, sheets, shapes and miscellaneous hot rolled products .....		20.777	"			



## I — Manufacturing Indexes — Continued

## (b) Monthly Indexes — Continued

Industry or Group	Industry Weights based on 1935-39	Commodity Weights	Unit of Measurement	Percentage of Coverage of Represented Items: 1949 Census Data	Type of Indicator and Description of Series	Source of Data
<b>Iron and Steel Products — Concluded</b>						
Wire and Wire Goods .....	666	100.000		54		
Barbed Wire .....		3.910	Tons		Production	D.B.S. - Industry and Merchandising Divi- sion
Steel Wire .....		32.180	"		Shipments	
Woven Wire — farm and lawn fencing .....		9.173	"		Production	
Woven Wire — chain link fabric .....		1.053	"		Production	
Steel Wire Rope .....		24.812	"		Production in the Wire Products In- dustry	
Multiple Strand and Twisted Single .....		2.556	"		Production	
Wire Nails .....		24.962	"		Production	D.B.S. — Labour and Prices Division
Cut Nails .....		.602	"		Production	
Steel Wire Staples .....		.752	"		Production	
Other Iron and Steel Products .....	.197				Man-hours	
<b>Transportation Equipment .....</b>	<b>6.749</b>					
Motor Vehicles .....	2.651	100.000		87		
Passenger Cars:						
4-door sedan + other closed .....		38.309	Number		Production	D.B.S. — Industry and Merchandising Divi- sion
2-door sedan .....		13.648	"			
chassis .....		2.663	"			
coupe + coupe roadster .....		6.402	"			
Commercial Vehicles:						
5,000 lbs. or less .....		8.196	"			
5,001 — 10,000 lbs. ....		4.720	"		Man-hours	D.B.S. — Labour and Prices Division
10,001 — 14,000 lbs. ....		9.126	"			
14,001 — 16,000 lbs. ....		9.028	"			
16,001 — 19,500 lbs. ....		1.421	"			
19,501 — 26,000 lbs. ....		1.027	"			
over 26,000 lbs. ....		.775	"			
Coaches or Buses .....		4.685	"			
Aircraft .....	.256				Man-hours	D.B.S. — Labour and Prices Division
Bicycles .....	.057					
Automobile Parts and Supplies .....	1.211					
Auto Accessories, Fabric .....	.030					
Railway Rolling-Stock .....	2.012					
Shipbuilding and Repairs .....	.442					
Other Transportation Equipment .....	.090					
<b>Non-ferrous Metal Products .....</b>	<b>7.600</b>					
Smelting and Refining .....	5.899	100.000		95		
Gold (from Base Metal Mines) .....		12.258	Fine Oz.		Production	D.B.S. — Industry and Merchandising Divi- sion
Copper-refined .....		26.437	'000 Lbs.			
Silver-refined .....		4.573	'000 Fine Oz.			
Nickel-refined .....		22.152	'000 Lbs.			
Lead-refined .....		7.820	"			
Zinc-refined .....		6.902	"			
Aluminum .....		11.340	"		Shipments	
Nickel in matte exported .....		8.518	"			
Brass and Copper Products .....	.801			65		D.B.S. — Industry and Merchandising Divi- sion
Copper Consumption .....			Short Tons		Materials	
White Metal Alloys .....	.216	100.000		42		
Lead Consumption .....		62.963	Tons		Materials	D.B.S. — Industry and Merchandising Divi- sion
Tin Consumption .....		19.907	Lbs.			
Zinc Consumption .....		17.130	Tons			
Aluminum Products .....	.159				Man-hours	D.B.S. — Labour and Prices Division
Jewellery, Electro-Plated Ware, etc. ....	.446					
Other Non-ferrous Products .....	.079					
<b>Electrical Apparatus and Supplies .....</b>	<b>3.432</b>					
Batteries <sup>1</sup> .....	.158	100.000		44		
Batteries for Starting and Ignition .....		92.600	Number of batteries		Shipments	
Batteries for Farm Lighting .....		2.810	Number of Cells			
Batteries for Railway Service .....		4.590	"			
Radios and Radio Parts <sup>1</sup> .....	.346	100.000		100		D.B.S. — Industry and Merchandising Divi- sion
Radio Receiving Sets .....		49.650	Number		Production: aggre- gate of 14 types, using 1947 prices Production: aggre- gate of 3 types, us- ing 1947 prices Production Man-hours	D.B.S. — Labour and Prices Division
Television Sets .....		11.680	"			
Radio Tubes .....		5.670	"			
Other Products .....		33.000				
Other Electrical Apparatus and Supplies <sup>1</sup> .....	2.928	100.000				
Electric Refrigerators .....		14.145	"	100	Production in the "Re- frigerators, Vacuum Cleaners and Appli- ances" industry	D.B.S. — Industry and Merchandising Divi- sion
Other .....		85.855			Man-hours	D.B.S. — Labour and Prices Division

1. New industrial breakdown in 1949. Industry weights based on 1949.

## I - Manufacturing Indexes - Concluded

## (b) Monthly Indexes - Concluded

Industry or Group	Industry Weights based on 1935-39	Commodity Weights	Unit of Measurement	Percentage of Coverage of Represented Items: 1949 Census Data	Type of Indicator and Description of Series	Source of Data
<b>Non-metallic Mineral Products .....</b>	<b>2.652</b>					
Cement.....	.407		Barrels	100	Production	D.B.S.—Industry and Merchandising Divi- sion
Salt (Commercial) .....	.077		Tons	100	Production	
Clay Products .....	.387	100.000		89		
Structural Tile .....		14.754	Tons		Production	
Drain Tile.....		6.557	Thousands		Production	
Building Brick .....		60.246	"		Production	
Flue Lining.....		2.869	Feet		Production	
Vitrified Sewer Pipe .....		11.476	"		Production	
Sand-lime Brick .....		4.098	Thousands		Production	
Lime and Gypsum Products .....	.288					
Lime .....	.191		Tons	100	Shipments & amounts produced for own use	D.B.S.—Industry and Merchandising Divi- sion
Gypsum Products .....	.097	100.000		96		
Gypsum Wallboard .....		61.165	'000 Sq. Ft.		Production	
Gypsum Plaster.....		16.505	Tons		Production	
Gypsum Lath .....		22.330	Sq. Ft.		Production	
Cement Products .....	.100	100.000		85	Production normally accounts for 85% of total Canadian output of concrete products	
Concrete Brick .....		3.840	Thousands		Production	
Concrete Blocks .....		45.599	"		Production - Chimney blocks—80% cover- age-raised to 100%	
Cement Pipe and Tile .....		19.041	Tons		Production - Gravel blocks-80% cover- age-raised to 100%	
Ready-mixed Concrete .....		31.520	Cu. Yds.		Production - Cinder blocks-100% coverage	
Glass Products .....	.492				Production	D.B.S.—Labour and Prices Division
Other Non-metallics .....	.901				Man-hours	
<b>Products of Petroleum and Coal .....</b>	<b>1.872</b>					
Coke and Gas Products .....	.579	100.000		92		D.B.S.—Industry and Merchandising Divi- sion
Coke .....		80.360	'000 Tons		Production in coke plants	
Gas .....		19.640	Million Cu. Ft.		Sales by coke plants	
Petroleum Products.....	1.293	100.000		95		
Motor Gasoline and Naptha Specialties .....		55.237	Barrels		Production of sale- able products	
Heavy Fuel Oil .....		15.594	'000 Barrels			
Light Fuel Oil .....		7.913	"			
Asphalt .....		4.189	Barrels			
Lubricating Oil .....		4.810	"			
Kerosene and Stove Oil .....		2.715	"			
Aviation Gasoline .....		6.284	"			
Lubricating Grease .....		.543	"			
Wax and Candles .....		.155	"			
Tractor Distillate .....		2.560	"			
<b>Chemicals and Allied Products .....</b>	<b>5.742</b>					
Vegetable Oil Mills .....	.062	100.000		99		D.B.S.—Industry and Merchandising Divi- sion
Flaxseed Oil .....		36.474	'000 Lbs.		Production	
Flaxseed Cake and Meal .....		10.792	"			
Soyabean Oil .....		14.228	"			
Soyabean Cake and Meal .....		14.260	"			
Other Oil .....		21.423	"			
Other Cake and Meal .....		2.823	"			
Paints, Pigments and Varnishes.....	.901		Dollar Sales	100	Shipments: Value ad- justed for price changes	D.B.S.—Industry and Merchandising Divi- sion
Acids, Alkalies and Salts .....	.962				Man-hours	
Fertilizers .....	.210					
Medicinal and Pharmaceutical Preparations ....	1.145					
Soaps and Washing Compounds .....	.602					
Other Chemicals .....	1.860	100.000				
Synthetic Rubber .....		10.350	'000 Lbs.	100		Production
Other .....		89.650			Man-hours	D.B.S.—Labour and Prices Division
<b>Miscellaneous Manufacturing Industries .....</b>	<b>1.209</b>					
<b>Total Manufacturing Industries .....</b>	<b>100.000</b>					D.B.S.—Labour and Prices Division



## II - Mining Indexes

## (a) Annual Indexes

Industry or Group	Weight 1935-39	Types of Indicator 1947	Number of Items 1947	Percentage of Coverage	
				1935-39	1947
<b>Metals</b> .....	<b>69.316</b>	<b>Gross</b>	<b>22</b>	<b>100</b>	<b>100</b>
<b>Non-Metals</b> .....	<b>5.606</b>				
Asbestos .....	3.776	Gross	3	100	100
Feldspar, Quartz, Etc. ....	.387	"	3	100	100
Gypsum .....	.501	"	4	100	100
Iron Oxides .....	.028	"	1	100	100
Mica .....	.038	"	5	100	100
Peat (Moss and Fuel) .....	.140	"	5	100	100
Salt <sup>2</sup> .....	.278	"	1	100	100
Talc and Soapstone .....	.058	"	2	100	100
Miscellaneous Non-Metals .....	.400	"	9	100	100
<b>Fuels</b> .....	<b>19.149</b>				
Coal .....	14.347	Gross	3	100	100
Natural Gas .....	2.302	"	4	100	100
Petroleum .....	2.500	"	1	100	100
<b>Quarrying and Sand Pits</b> .....	<b>5.929</b>				
Sand and Gravel .....	3.854	Gross	8	100	100
Stone .....	2.075	"	43	99	100
<b>Total Mining</b> .....	<b>100.000</b>		<b>114</b>		

1. Prior to 1941, the index was estimated to move with total non-metals. The weight of the industry in 1935-39 was based on this assumption.

2. An arbitrary unit value of \$1.60 per ton was applied to the total tonnage of salt mined in the base period, as an estimate of the value added in the mining section of the industry.

3. Due to considerable variations in the unit values reported as between different areas, presumably because of differences in methods of operation and distribution, production in each area was treated separately and assigned an individual weight based on reported unit values.

Note: Pitchblende products are excluded from the index.

## (b) Monthly Indexes

Industry or Group	Industry Weights based on 1935-39	Commodity Weights	Unit of Measurement	Percentage of Coverage of Represented Items: 1949 Census Data	Type of Indicator and Description of Series	Source of Data
<b>Metals</b> .....	<b>69.316</b>	<b>100.000</b>		<b>95</b>		
Gold .....		51.826	Fine Ounces		Production - Total Metal Content	D.B.S.-Industry and Merchandising Divi- sion
Silver .....		3.387	'000 Fine Ounces			
Copper .....		18.072	'000 Lbs.			
Nickel .....		17.045	"			
Lead .....		5.109	"			
Zinc .....		4.407	"		Production - Sulphur Content	
Iron Ore .....		.025	Tons			
Pyrites .....		.129	'000 Lbs.			
<b>Non-Metals</b> .....	<b>5.606</b>			<b>84</b>		
Gypsum .....	.591		Tons		Shipments & amounts produced for own use	D.B.S.-Industry and Merchandising Divi- sion
Feldspar .....	.060		"		Shipments	
Asbestos .....	4.446	100.000	"		Production	
Crude .....		6.915	"		Production	
Fibres .....		71.932	"		Production	
Shorts .....		21.153	"		Production	
Salt .....	.327		"		Production	
Sodium Sulphate .....	.182		"		Production	
<b>Fuels</b> .....	<b>19.149</b>			<b>100</b>		
Coal .....	14.347	100.000			Production	D.B.S.-Industry and Merchandising Divi- sion
Bituminous .....		85.767	'000 Tons			
Sub-bituminous .....		11.215	"			
Lignite .....		3.018	"			
Petroleum .....	2.500		'000 Barrels		Shipments & amounts produced for own use	D.B.S.-Industry and Merchandising Divi- sion
Natural Gas .....	2.302	100.000				
New Brunswick .....		6.404	M Cu. Ft.		Shipments & amounts produced for own use	D.B.S. - Public Fi- nance and Transpor- tation Division
Ontario .....		75.456	"			
Alberta .....		17.972	"			
Manitoba, Sask., N.W.T. ....		.168	"			
<b>Quarrying and Sand Pits</b> .....	<b>5.929</b>		tons		Railway Revenue Freight Carried	
<b>Total mining</b> .....	<b>100.000</b>					

Note. Pitchblende products are excluded from the index.

## III - Electricity and Gas Indexes

## (a) Annual Indexes

Industry or Group	Weight 1935-39	Types of Indicator 1947	Number of Items 1947		Percentage of Coverage			
			Products	Materials and Fuel	Products		Materials	
					1935-39	1947	1935-39	1947
Electric Power <sup>1</sup> .....	91.681	Net	1	8	100	100		
Manufactured Gas <sup>2</sup> .....	8.319	Net	5	17	100	100	99	99
<b>Total Electricity and Gas</b> .....	<b>100.000</b>		<b>6</b>	<b>25</b>				

1. Products index based on power generated. As no quantitative information on materials was available, only fuel consumed was deducted from the gross aggregate to yield the net index.

2. Includes only those establishments in which the main product is manufactured gas for sale as such. Those plants in which the principal product is coke but which also produce gas as a secondary product are classified to the "Coke and Gas" industry in the manufacturing sector.

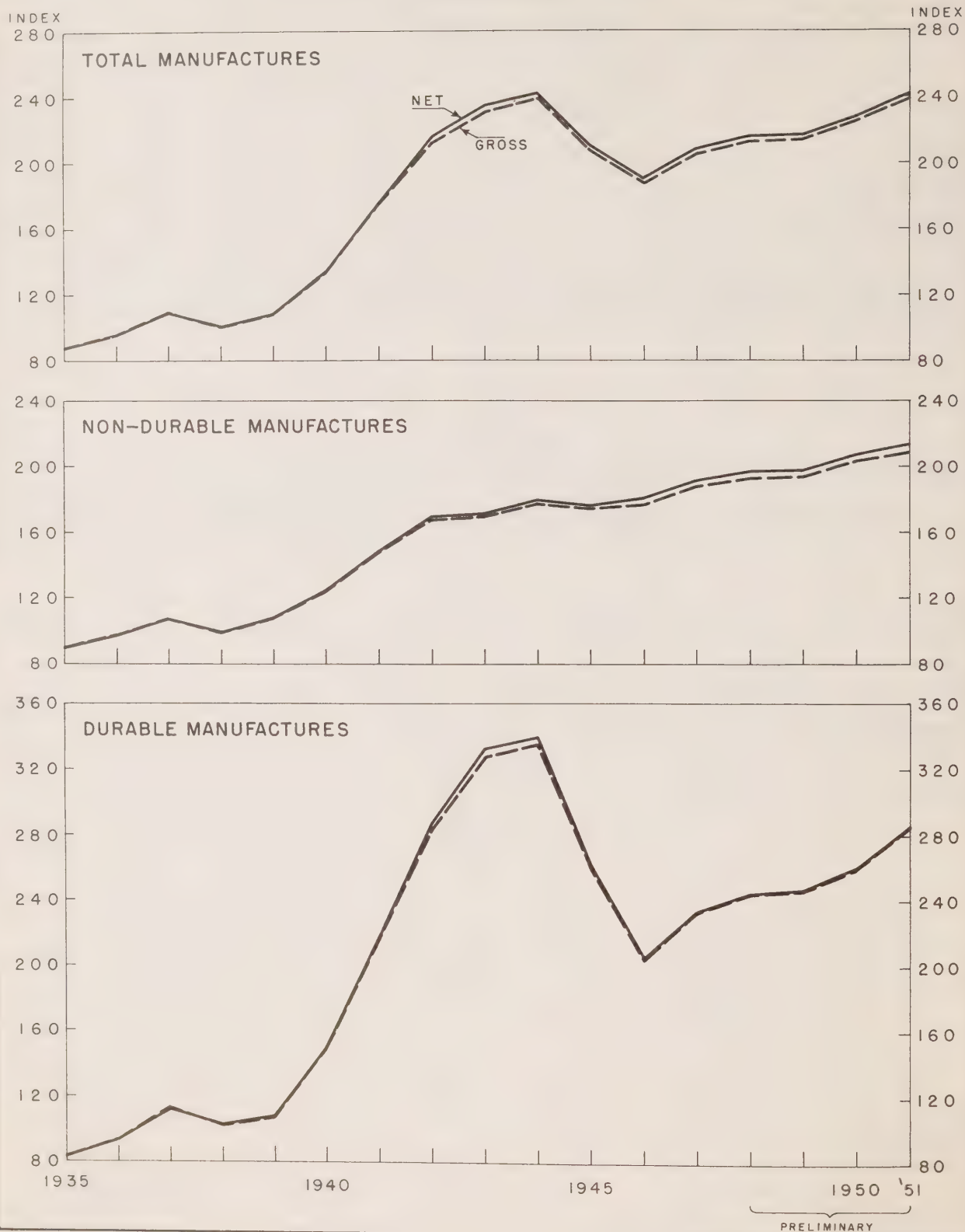
## (b) Monthly Indexes

Industry or Group	Industry Weights based on 1935-39	Commodity Weights	Unit of Measurement	Percentage of Coverage of Represented Items: 1949 Census Data	Type of Indicator and Description of Series	Source of Data
Electric Power .....	91.681		Million kwh.	100	Production	D.B.S.-Public Finance and Transportation Division
Manufactured Gas .....	8.319	100.000		99		
Coke .....		4.640	Tons		Shipments: sales by gas plants	D.B.S.-Industry and Merchandising Divi- sion
Manufactured Gas .....		95.360	Million cu. ft.		Sales: by gas plants	
<b>Total Electricity and Gas</b> .....	<b>100.000</b>					



## MANUFACTURING INDUSTRIES, 1935 TO 1951

1935-1939=100



## **APPENDIX C**

### **Annual Net and Gross Industry Indexes**





# APPENDIX C

## Annual Net and Gross Industry Indexes

1935-1939 = 100

	Industrial Production Total		Mining					Electricity and Gas				
			Total	Metal Mining	Fuels	Non-Metal Mining	Quarrying and Sand Pits	Total		Electric Power		
	Net	Gross	Gross	Gross	Gross	Gross	Gross	Net	Gross	Net	Gross	
1935-39 Weights.....	1		100.000	69.316	19.149	5.606	5.929	100.000		91.681		
1935.....	85.6	85.8	79.5	78.7	83.3	68.9	86.7	90.4	90.8	88.9	89.0	
1936.....	94.6	94.8	89.2	88.8	92.0	92.3	81.5	97.1	97.3	96.9	97.0	
1937.....	108.0	108.1	103.8	102.9	101.0	123.3	105.2	105.1	105.1	105.7	105.8	
1938.....	102.0	101.8	109.4	110.9	106.0	98.0	112.8	99.9	99.5	100.1	99.9	
1939.....	109.7	109.4	118.0	118.6	117.6	117.5	113.7	107.5	107.4	108.4	108.3	
1940.....	131.4	131.1	125.7	125.0	131.1	118.8	122.4	114.5	114.4	115.0	115.0	
1941.....	164.8	163.7	132.0	129.7	138.0	148.9	122.8	126.5	126.4	127.2	127.3	
1942.....	195.7	192.9	129.5	127.5	140.8	137.7	107.8	142.2	141.7	142.9	142.7	
1943.....	208.5	206.0	116.1	111.1	130.9	144.5	99.5	153.6	153.6	154.7	154.7	
1944.....	212.4	209.9	104.1	94.9	127.2	142.9	99.9	153.2	154.1	154.1	155.1	
1945.....	187.2	185.0	100.9	91.2	118.2	153.4	108.4	152.1	152.5	152.8	153.3	
1946.....	171.9	169.8	97.1	79.9	121.9	170.4	149.2	157.8	158.4	158.6	159.5	
1947.....	187.8	185.9	106.2	88.7	112.8	189.2	211.2	169.3	170.0	171.5	172.4	
1948 <sup>P</sup> .....	196.3	194.3	122.2	99.4	142.7	204.3	245.6	168.6	169.3	169.9	170.8	
1949 <sup>P</sup> .....	199.6	197.6	131.7	107.7	173.7	175.4	234.7	176.1	176.8	177.9	178.8	
1950 <sup>P</sup> .....	211.5	209.4	145.4	111.0	198.0	247.2	282.4	190.9	191.7	193.6	194.6	
1951 <sup>P</sup> .....	226.5	224.2	161.8	113.5	258.8	271.9	309.3	214.2	215.1	218.3	219.4	
	Electricity and Gas		Total Manufactures		Non-durable Manufactures							
	Manufactured Gas	Total			Foods and Beverages		Foods					
					Total		Total		Meat Products			
	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross
1935-39 Weights.....	8.319		100.000		61.001		19.059		14.892		2.198	
1935.....	106.7	110.2	86.5	86.7	89.0	89.2	86.6	86.6	88.8	89.2	80.1	84.1
1936.....	99.9	100.3	95.5	95.8	97.1	97.5	96.7	97.4	97.7	98.7	97.5	100.6
1937.....	98.1	97.1	109.3	109.4	106.7	106.8	103.3	103.5	101.6	101.6	98.9	105.8
1938.....	97.4	95.4	100.6	100.4	98.9	98.7	103.5	103.3	102.5	101.8	103.5	100.7
1939.....	97.9	97.1	108.1	107.7	108.2	107.7	109.8	109.1	109.4	108.6	119.9	108.8
1940.....	109.1	107.4	134.4	134.0	124.6	124.1	121.9	120.2	119.4	117.5	134.5	130.3
1941.....	119.2	116.7	175.9	174.5	148.7	147.5	141.9	138.5	139.1	135.0	157.9	151.9
1942.....	134.3	131.1	215.7	212.1	169.4	166.8	150.9	144.4	144.3	137.2	184.9	158.7
1943.....	141.1	141.0	234.5	231.1	171.5	169.3	157.3	150.8	156.0	148.7	206.7	177.8
1944.....	143.1	142.5	242.3	238.9	179.8	177.2	175.3	169.1	171.1	165.0	224.6	208.9
1945.....	144.8	144.2	209.8	206.9	176.3	173.5	177.7	171.2	170.0	163.9	217.2	182.7
1946.....	149.1	146.3	189.9	187.0	180.2	176.1	189.7	181.2	177.2	168.9	196.4	158.6
1947.....	145.0	143.7	207.7	205.1	191.2	187.2	196.4	187.8	181.5	173.4	176.1	145.2
1948 <sup>P</sup> .....	154.4	153.0	215.5	212.8	197.1	193.0	202.2	193.3	183.0	174.8	182.6	150.6
1949 <sup>P</sup> .....	155.9	154.5	217.0	214.3	198.2	194.1	203.3	194.4	180.3	172.3	171.5	141.4
1950 <sup>P</sup> .....	161.5	160.1	228.1	225.2	208.3	203.9	205.3	196.3	183.6	175.4	168.8	139.2
1951 <sup>P</sup> .....	169.7	168.2	242.1	239.1	214.0	209.5	212.5	203.2	188.7	180.3	164.3	135.5



**Annual Net and Gross Industry Indexes — Continued**  
1935-1939 = 100

	Non-durable Manufactures											
	Foods											
	Dairy Products										Canning and Preserving	
	Total		Butter and Cheese		Condensed Milk		Process Cheese		Other		Total	
	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross
1935-39 Weights .....	1.471		1.035		0.220		0.115		0.101		2.097	
1935 .....	87.2	87.3	96.3	90.9	75.7	75.4	85.0	82.6	82.4	81.7	83.3	83.8
1936 .....	94.0	93.9	96.4	97.6	80.2	76.8	96.6	94.0	96.7	93.1	100.2	99.7
1937 .....	101.8	99.8	101.0	99.5	106.2	101.4	97.8	95.1	104.6	105.3	104.1	102.6
1938 .....	107.7	108.2	105.9	105.7	116.4	119.0	109.0	107.2	105.3	110.9	103.1	102.5
1939 .....	109.4	110.7	106.4	106.2	121.5	127.3	111.6	121.1	111.1	109.0	109.3	111.3
1940 .....	123.4	118.9	118.7	110.8	141.7	144.9	122.8	131.6	132.6	130.5	122.2	114.9
1941 .....	150.1	135.8	140.5	121.1	184.1	174.3	165.7	166.6	156.1	167.2	151.8	139.8
1942 .....	162.2	147.4	147.3	129.4	205.9	189.9	182.8	196.7	197.0	182.5	137.7	131.5
1943 .....	178.0	156.8	164.9	134.8	199.2	192.7	209.7	244.1	229.8	203.9	126.6	125.8
1944 .....	186.8	158.4	172.5	133.6	203.5	202.1	228.8	248.5	249.0	214.0	166.2	161.4
1945 .....	178.7	160.7	159.9	131.7	236.0	235.6	211.6	244.9	209.6	199.3	166.4	163.4
1946 .....	163.0	152.3	137.2	120.6	229.6	227.6	214.1	254.9	223.9	196.8	204.3	195.8
1947 .....	205.6	169.5	178.7	133.0	269.2	247.0	224.7	252.5	321.3	280.4	189.2	190.2
1948 <sup>P</sup> .....	218.0	179.7	2	2	2	2	2	2	2	2	198.9	200.0
1949 <sup>P</sup> .....	217.7	179.5	2	2	2	2	2	2	2	2	176.7	177.6
1950 <sup>P</sup> .....	209.2	172.5	2	2	2	2	2	2	2	2	180.8	181.8
1951 <sup>P</sup> .....	222.2	183.2	2	2	2	2	2	2	2	2	195.3	196.3
	Non-durable Manufactures											
	Foods											
	Canning and Preserving				Grain Mill Products							
	Fish Curing and Packing		Fruit and Vegetable Preparations		Total		Flour and Feed Mills		Breakfast Foods		Stock and Poultry Feeds	
	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross
1935-39 Weights.....	0.713		1.384		2.296		1.604		0.492		0.200	
1935 .....	93.2	91.7	78.2	79.7	95.3	92.7	100.1	96.8	87.7	88.8	75.8	70.0
1936 .....	99.4	102.2	100.6	98.4	101.8	102.5	104.8	104.9	97.8	99.9	87.3	89.1
1937 .....	97.4	97.3	107.6	105.4	100.8	99.6	99.3	97.0	106.7	106.5	98.7	102.9
1938 .....	102.2	102.4	103.5	102.5	98.4	97.6	94.2	93.2	107.3	105.4	110.4	114.2
1939 .....	107.7	106.4	110.1	113.9	103.7	107.6	101.6	108.1	100.6	99.4	127.8	123.8
1940 .....	130.8	120.2	117.7	112.2	110.0	114.0	113.3	120.4	86.8	84.8	141.1	134.0
1941 .....	174.2	140.8	140.2	139.3	124.4	132.0	127.5	138.6	99.7	96.3	160.3	166.7
1942 .....	155.3	135.4	128.7	129.5	121.7	135.1	121.5	136.8	99.6	98.3	177.8	211.5
1943 .....	137.9	131.4	120.8	122.9	158.8	171.6	145.3	161.3	152.9	147.8	281.5	313.2
1944 .....	136.2	128.3	181.7	178.5	166.2	179.8	145.7	156.5	122.2	120.2	439.4	513.4
1945 .....	167.6	166.1	165.8	162.0	166.7	185.1	140.4	157.9	133.6	131.5	459.4	535.8
1946 .....	169.0	169.5	222.5	209.3	192.5	206.8	162.6	173.1	147.8	145.8	542.9	628.1
1947 .....	159.9	165.3	204.3	203.0	193.3	217.6	149.0	175.8	134.6	132.7	694.1	763.1
1948 <sup>P</sup> .....	157.6	162.9	220.2	218.8	163.2	183.7	117.7	138.9	119.1	117.4	634.4	697.5
1949 <sup>P</sup> .....	151.0	156.1	190.0	188.8	162.1	182.5	104.5	123.3	128.4	126.6	705.8	776.0
1950 <sup>P</sup> .....	170.0	175.7	186.3	185.1	159.7	179.8	107.5	126.8	129.7	127.9	650.8	715.5
1951 <sup>P</sup> .....	171.4	177.2	207.7	206.4	179.6	202.2	116.7	137.7	157.3	155.1	736.9	810.2

**Annual Net and Gross Industry Indexes — Continued**  
1935-1939= 100

	Non-durable Manufactures													
	Foods													
	Bread and Bakery Products Total		Miscellaneous Foods											
			Total		Biscuits & Confectionery		Sugar Refineries		Malt Mills		Starch and Glucose		Miscellaneous Foods n.e.s.	
Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	
1935-39 Weights.....	2.545		4.285		1.818		0.878		0.205		0.186		1.198	
1935 .....	92.2	91.7	91.0	91.7	90.8	90.5	90.6	92.0	106.7	98.7	85.4	86.1	89.9	92.9
1936 .....	93.7	93.8	98.2	99.7	93.5	97.7	103.6	103.4	92.2	96.7	98.6	100.2	102.2	100.5
1937 .....	100.8	100.4	102.5	101.5	105.0	101.6	96.3	96.4	100.7	101.2	104.4	103.1	103.2	104.8
1938 .....	106.8	106.4	99.6	99.4	102.0	101.9	97.8	98.6	102.3	101.4	97.6	100.0	97.2	95.7
1939 .....	106.5	107.6	108.7	107.8	108.8	108.2	111.7	109.6	98.1	102.0	113.9	110.6	107.5	106.0
1940 .....	112.1	114.4	118.3	115.3	125.8	121.5	108.1	110.3	109.3	108.8	115.3	117.7	116.2	110.4
1941 .....	121.3	124.1	137.9	131.8	152.4	145.5	120.4	116.9	124.0	123.9	140.6	143.8	130.7	121.3
1942 .....	134.1	136.9	138.7	126.7	162.3	146.3	80.0	77.6	129.2	134.8	172.7	170.7	142.3	124.6
1943 .....	147.3	150.1	140.5	129.2	158.0	142.8	82.0	83.1	143.8	144.8	160.0	163.3	153.2	134.4
1944 .....	150.9	154.1	155.3	145.1	166.9	151.3	97.0	97.3	148.8	155.1	157.9	157.4	181.2	167.1
1945 .....	156.0	159.6	154.7	146.6	161.8	146.4	91.7	94.1	157.0	163.0	125.6	133.9	194.2	184.7
1946 .....	167.5	171.6	156.5	144.7	158.9	143.7	93.2	92.5	185.6	186.3	112.2	117.7	201.3	181.6
1947 .....	162.1	166.5	177.5	161.4	187.8	164.0	98.9	103.9	194.8	199.0	186.4	183.5	216.1	189.2
1948 <sup>P</sup> .....	163.2	167.6	185.7	168.9	2	2	125.0	131.3	2	2	2	2	2	2
1949 <sup>P</sup> .....	159.3	163.6	195.8	178.0	2	2	126.0	132.4	2	2	2	2	2	2
1950 <sup>P</sup> .....	161.8	166.2	209.4	190.4	2	2	137.8	144.8	2	2	2	2	2	2
1951 <sup>P</sup> .....	176.0	180.8	199.0	180.9	2	2	118.4	124.4	2	2	2	2	2	2
Non-durable Manufactures														
Beverages												Tobacco and Tobacco Products Total		
Total		Aerated and Mineral Waters		Distilleries		Breweries		Wine						
Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross			
1935-39 Weights.....	4.167		1.086		1.064		1.892		0.125		1.771			
1935 .....	78.6	77.4	67.8	63.2	66.5	66.7	90.8	91.0	90.8	85.9	80.7	83.3		
1936 .....	93.2	92.9	81.2	77.4	106.1	107.5	93.2	94.4	86.8	82.0	88.9	89.7		
1937 .....	109.5	110.3	95.3	99.6	131.6	129.4	105.6	105.8	104.6	109.1	101.2	101.0		
1938 .....	107.2	108.5	118.2	123.4	100.5	100.6	104.7	104.4	106.7	107.7	110.9	109.2		
1939 .....	111.5	110.9	137.5	136.4	95.2	95.9	105.7	104.4	111.1	115.3	118.2	116.7		
1940 .....	131.0	130.1	166.2	164.3	107.4	107.9	123.7	121.8	136.1	147.2	126.6	124.9		
1941 .....	151.9	151.2	183.6	186.8	106.2	107.2	160.5	156.1	135.2	141.8	140.9	135.7		
1942 .....	174.5	170.3	190.4	182.2	115.6	119.3	198.9	192.4	167.9	165.5	171.5	163.3		
1943 .....	162.0	158.0	187.4	181.2	117.1	119.1	176.0	169.5	112.8	114.6	183.8	173.5		
1944 .....	190.5	183.8	217.4	201.4	134.5	143.7	210.4	199.9	131.3	129.6	200.6	189.1		
1945 .....	205.1	197.5	179.9	162.0	179.4	190.7	238.6	225.7	135.8	137.8	230.2	216.6		
1946 .....	234.4	225.2	189.3	175.6	208.6	214.4	279.0	262.9	172.6	178.7	204.4	193.2		
1947 .....	249.4	239.0	237.7	217.8	193.1	195.6	292.2	279.9	184.0	183.1	211.9	202.3		
1948 <sup>P</sup> .....	270.9	259.6	293.3	268.7	196.1	198.6	307.9	294.9	153.8	153.0	215.8	206.0		
1949 <sup>P</sup> .....	285.7	273.8	348.2	319.0	201.8	204.4	306.7	293.8	138.4	137.7	224.4	214.2		
1950 <sup>P</sup> .....	282.9	271.1	335.1	307.0	215.6	218.4	301.7	289.0	117.0	116.4	227.5	217.2		
1951 <sup>P</sup> .....	297.7	285.3	319.7	292.9	260.2	263.6	317.4	304.0	130.7	130.1	212.2	202.6		



**Annual Net and Gross Industry Indexes — Continued**  
1935-1939 = 100

	Non-durable Manufactures											
	Tobacco and Tobacco Products				Rubber Products Total		Leather Products					
	Tobacco, Cigars and Cigarettes		Tobacco Processing and Packing				Total		Boots and Shoes, Leather	Belting Leather and Tanneries		
	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Gross	Net	Gross	
1935-39 Weights .....	1.581		0.190		2.786		2.309		1.301		0.553	
1935 .....	84.2	86.8	51.6	54.2	87.9	88.5	95.9	96.0	96.7	99.9	100.3	
1936 .....	89.9	90.7	80.6	81.5	96.2	95.9	96.3	96.4	94.4	100.4	101.0	
1937 .....	104.5	104.3	73.2	73.6	112.3	111.1	105.7	105.7	105.5	104.4	104.1	
1938 .....	107.8	106.4	137.0	132.8	97.0	95.6	93.3	93.3	95.3	86.8	86.4	
1939 .....	113.5	111.8	157.5	157.9	106.6	108.8	108.7	108.5	108.1	108.5	108.0	
1940 .....	125.0	122.3	140.3	147.0	116.5	121.2	116.1	115.7	111.9	109.4	109.2	
1941 .....	146.2	139.8	96.9	101.7	154.4	163.0	141.1	140.0	135.7	122.5	121.7	
1942 .....	174.3	164.5	148.4	153.4	150.6	160.4	150.0	148.1	142.8	138.2	137.5	
1943 .....	190.2	178.2	130.1	134.7	147.0	168.3	151.1	150.1	145.4	141.8	142.0	
1944 .....	208.6	195.7	134.0	134.3	149.0	161.9	149.6	147.8	144.4	137.0	137.2	
1945 .....	235.6	220.2	184.7	186.6	180.2	193.2	155.0	153.4	154.1	138.0	138.9	
1946 .....	209.2	197.2	164.0	160.2	158.0	167.2	167.9	166.8	170.6	153.9	155.0	
1947 .....	211.3	199.9	217.3	222.6	230.7	245.7	148.7	147.4	145.2	144.9	145.0	
1948 <sup>P</sup> .....	215.2	203.6	2	2	227.6	242.4	129.6	128.5	131.5	110.1	110.2	
1949 <sup>P</sup> .....	223.8	211.7	2	2	208.5	222.1	133.5	132.3	143.1	102.2	102.3	
1950 <sup>P</sup> .....	226.8	214.6	2	2	251.9	268.3	126.8	125.7	133.5	99.1	99.2	
1951 <sup>P</sup> .....	211.6	200.2	2	2	264.3	281.5	117.0	116.0	131.9	85.1	85.2	
	Non-durable Manufactures											
	Leather Products				Textile Products (Ex. Clothing)							
	Leather Gloves and Mittens		Boot and Shoe Findings, Leather	Miscella- neous Leather Goods	Total		Cotton Goods					
							Total		Cotton Thread	Cotton Yarn and Cloth		Other Cotton Goods
	Net	Gross	Gross	Gross	Net	Gross	Net	Gross	3	Net	Gross	3
1935-39 Weights .....	0.132		0.056	0.267	5.658		2.223		0.144	2.005		0.074
1935 .....	95.4	95.3	93.4	84.9	91.1	92.9	83.5	88.1	99.3	82.0	87.0	94.7
1936 .....	106.0	104.2	96.6	92.5	101.7	99.9	104.3	99.4	98.1	105.1	99.7	94.3
1937 .....	102.0	103.2	101.1	111.9	110.2	107.8	111.4	107.2	108.3	111.6	106.9	112.1
1938 .....	94.6	96.2	92.5	96.8	88.8	90.9	86.2	91.4	97.7	84.9	90.7	98.8
1939 .....	102.1	101.0	116.5	113.8	108.2	108.4	114.6	113.9	96.6	116.4	115.6	100.0
1940 .....	127.9	122.9	118.7	143.8	147.6	146.0	158.4	152.6	135.6	161.4	155.0	121.0
1941 .....	161.5	145.9	145.6	194.9	167.5	163.7	177.4	167.0	143.5	181.2	169.7	138.6
1942 .....	193.3	163.8	140.9	189.4	186.8	179.2	187.1	168.6	146.7	190.8	170.3	165.0
1943 .....	179.5	161.5	152.5	183.9	172.1	165.1	158.0	141.9	145.4	158.2	140.4	176.1
1944 .....	206.2	175.0	143.6	173.9	162.0	158.9	137.2	132.3	131.1	135.8	130.4	188.2
1945 .....	202.0	168.7	163.0	170.1	160.5	161.3	133.4	136.9	121.5	132.8	136.7	188.3
1946 .....	183.4	159.4	182.5	172.7	161.7	161.1	127.8	124.9	128.5	125.8	122.6	180.6
1947 .....	176.7	153.8	142.0	161.3	172.9	170.1	138.0	131.5	115.9	138.1	130.9	178.9
1948 <sup>P</sup> .....	2	2	2	2	180.2	177.3	138.2	131.7	2	2	2	2
1949 <sup>P</sup> .....	2	2	2	2	186.0	183.0	140.2	133.6	2	2	2	2
1950 <sup>P</sup> .....	2	2	2	2	212.4	209.0	162.5	154.8	2	2	2	2
1951 <sup>P</sup> .....	2	2	2	2	208.6	205.2	161.3	153.7	2	2	2	2

**Annual Net and Gross Industry Indexes - Continued**  
1935-1939 = 100

	Non-durable Manufactures											
	Textile Products (Ex. Clothing)											
	Woollen Goods							Synthetic Textiles and Silk	Other Textile Products			
	Total		Woollen Cloth	Woollen Yarn		Other Woollen Goods			Total	Total		Dyeing and Finishing of Textiles
	Net	Gross	3	Net	Gross	Net	Gross			3	Net	Gross
1935-39 Weights .....	1.139		0.639	0.272		0.228		1.127	1.169		0.149	
1935 .....	97.4	97.1	100.5	98.8	97.5	86.9	86.9	101.5	89.4	89.8	101.3	
1936 .....	103.3	103.4	104.2	106.6	106.7	96.7	97.3	99.2	97.6	98.0	98.0	
1937 .....	112.6	109.6	105.0	118.0	110.7	127.6	121.1	105.1	110.6	110.1	107.0	
1938 .....	83.2	83.8	82.5	87.6	87.5	79.9	82.9	93.6	94.5	94.3	86.5	
1939 .....	103.5	106.2	107.8	89.0	97.7	108.9	111.8	100.5	107.9	107.8	107.2	
1940 .....	149.8	153.1	163.5	128.9	138.2	136.3	141.9	112.9	158.4	158.4	123.3	
1941 .....	152.7	154.5	161.6	130.9	137.9	153.7	154.3	145.6	184.2	183.9	169.7	
1942 .....	182.7	182.2	200.3	159.8	157.9	160.7	160.4	168.2	208.3	206.9	209.0	
1943 .....	167.4	167.7	185.0	151.9	144.7	136.7	146.6	174.1	201.6	197.9	194.7	
1944 .....	160.4	157.9	168.3	149.6	140.2	151.1	149.8	179.5	194.0	190.4	179.8	
1945 .....	161.4	162.0	173.7	149.1	147.8	141.5	146.0	183.2	189.3	185.6	192.2	
1946 .....	173.7	176.8	188.5	155.1	162.9	154.6	160.4	199.3	178.1	177.9	219.4	
1947 .....	179.7	178.8	186.0	196.9	182.4	141.4	154.1	220.7	186.3	186.1	235.7	
1948 <sup>P</sup> .....	172.3	171.4	2	2	2	2	2	262.9	188.0	187.8	2	
1949 <sup>P</sup> .....	161.7	160.9	2	2	2	2	2	304.3	182.9	182.7	2	
1950 <sup>P</sup> .....	160.3	159.5	2	2	2	2	2	386.4	190.2	190.0	2	
1951 <sup>P</sup> .....	145.5	144.8	2	2	2	2	2	392.9	182.4	182.2	2	
Non-durable Manufactures												
Textile Products (Ex. Clothing)							Clothing (Textile and Fur)					
Other Textile Products							Men's, Women's and Children's Clothing					
Carpets, Mats and Rugs		Cordage, Rope and Twine		Cotton and Jute Bags	Other Textile Products n.e.s.	Total		Total	Men's Factory Clothing	Women's Factory Clothing	Clothing Contractors	
Net <sup>3</sup>	Gross	Net	Gross	3	3	Net	Gross	Gross	Gross	Gross	3	
1935-39 Weights.....	0.163		0.175		0.136	0.546	7.107		4.006	2.080	1.789	0.137
1935 .....	84.1	84.1	101.7	104.4	85.5	84.7	91.8	93.4	96.0	94.2	97.2	107.9
1936 .....	99.6	99.6	110.4	113.2	96.0	93.2	97.0	98.0	99.2	98.9	99.2	103.8
1937 .....	128.7	128.7	108.9	105.6	101.3	109.0	104.8	104.7	105.9	107.4	104.6	99.9
1938 .....	88.5	88.5	83.0	81.2	96.7	101.7	98.4	97.5	96.5	95.2	98.1	95.1
1939 .....	99.2	99.2	95.9	95.6	120.3	111.4	108.0	106.4	102.4	104.2	100.9	93.4
1940 .....	106.0	106.0	145.0	144.4	120.8	147.9	125.5	124.7	124.2	136.2	112.8	89.4
1941 .....	120.4	120.4	150.9	149.4	134.6	172.5	141.8	141.3	149.8	158.9	142.0	114.6
1942 .....	115.5	111.1	171.1	165.8	144.3	197.6	161.9	161.8	182.7	198.9	163.2	190.2
1943 .....	103.9	94.3	167.5	151.4	176.2	187.3	156.7	155.8	177.2	191.4	158.9	200.4
1944 .....	80.4	80.3	192.0	168.0	164.5	179.6	147.1	147.3	163.2	163.6	159.0	212.3
1945 .....	90.5	84.5	181.2	162.1	169.5	168.9	146.6	147.9	160.5	148.6	168.1	241.9
1946 .....	84.6	91.1	171.1	164.1	151.8	152.4	152.9	154.2	160.7	138.9	177.7	269.9
1947 .....	86.4	100.2	165.9	151.7	171.6	159.5	147.7	149.8	154.1	137.6	163.1	288.0
1948 <sup>P</sup> .....	2	2	2	2	2	2	156.0	158.2	162.3	2	2	2
1949 <sup>P</sup> .....	2	2	2	2	2	2	159.4	161.7	170.6	2	2	2
1950 <sup>P</sup> .....	2	2	2	2	2	2	155.7	157.9	169.6	2	2	2
1951 <sup>P</sup> .....	2	2	2	2	2	2	149.7	151.8	163.1	2	2	2



**Annual Net and Gross Industry Indexes — Continued**  
1935-1939 = 100

	Non-durable Manufactures											
	Clothing (Textile and Fur)								Paper Products			
	Hosiery and Knit Goods		Miscellaneous Clothing						Total		Pulp and Paper	
	Total		Total	Corsets	Fur Goods	Fur Dressing and Dyeing	Hats and Caps	Miscellaneous Clothing n.e.s.				
	Net	Gross	Gross	Gross	Gross	3	Gross	Gross	Net	Gross	Net	Gross
1935-39 Weights .....	1.887		1.214	0.179	0.422	0.083	0.473	0.057	8.701		6.896	
1935 .....	82.6	88.7	92.3	99.5	83.3	101.6	96.5	87.1	90.0	87.2	93.3	90.0
1936 .....	92.5	96.1	96.8	91.9	93.7	102.4	99.7	103.6	98.9	100.4	101.3	103.4
1937 .....	103.0	102.8	103.7	98.7	101.2	105.5	105.2	124.0	114.0	116.2	115.5	118.3
1938 .....	101.5	97.9	100.1	102.6	103.8	90.3	98.3	94.2	91.7	91.6	88.1	87.8
1939 .....	120.5	114.5	107.0	107.3	117.9	100.2	100.3	91.1	105.4	104.6	101.7	100.6
1940 .....	125.1	122.2	130.5	113.5	135.6	131.1	131.2	140.4	126.6	128.3	124.2	126.4
1941 .....	124.2	122.1	142.8	130.4	137.8	155.5	139.6	230.5	143.7	145.5	135.7	138.2
1942 .....	123.2	117.6	153.4	142.1	150.3	131.6	151.0	267.5	143.4	145.4	132.7	135.5
1943 .....	116.3	112.9	151.6	129.9	164.4	132.8	143.2	225.1	140.0	141.3	127.1	129.3
1944 .....	114.2	114.9	145.2	136.6	162.9	147.1	127.3	189.5	149.1	147.0	134.8	132.7
1945 .....	113.0	118.0	152.8	143.7	177.9	181.0	125.5	181.3	161.2	155.7	144.7	138.5
1946 .....	126.2	131.4	168.5	183.0	181.8	209.5	144.2	166.4	188.9	179.8	172.1	161.1
1947 .....	132.0	139.8	151.1	180.0	176.8	165.7	113.1	164.5	207.4	197.6	189.9	177.8
1948 P.....	146.1	154.7	183.1	2	2	2	99.8	2	217.7	207.4	200.3	187.5
1949 P.....	141.6	150.0	177.6	2	2	2	107.4	2	213.7	203.6	193.2	180.9
1950 P.....	131.1	138.8	180.9	2	2	2	96.5	2	230.4	219.5	209.2	195.9
1951 P.....	132.8	140.6	167.0	2	2	2	76.5	2	247.8	236.1	231.0	216.3
	Non-durable Manufactures											
	Paper Products				Printing, Publishing and Allied Trades					Products of Petroleum and Coal		
	Roofing Paper		Boxes and Bags, Paper	Miscellaneous Paper Products and Wallpaper	Total	Printing and Book-binding and Trade Composition	Printing and Publishing	Engraving, Stereotyping and Electrotyping	Lithographing	Total		
	Net	Gross	3	3	3	3	3	3	3	Net	Gross	
1935-39 Weights .....	0.211		0.854	0.740	5.996	1.728	3.417	0.430	0.421	1.872		
1935 .....	76.2	72.4	85.7	67.6	93.9	90.2	95.3	98.1	93.1	87.6	87.8	
1936 .....	94.3	91.2	93.1	84.0	99.5	97.8	101.6	98.5	90.8	95.7	95.6	
1937 .....	113.6	113.5	105.8	109.5	105.6	104.9	105.6	104.5	109.2	104.6	104.6	
1938 .....	97.2	101.1	102.2	111.9	98.9	100.2	98.4	99.0	98.0	102.7	102.2	
1939 .....	118.7	121.9	113.2	126.9	102.2	106.9	99.2	99.9	108.9	109.4	109.9	
1940 .....	150.6	146.5	122.0	147.7	102.1	110.9	96.1	111.9	104.2	125.9	126.1	
1941 .....	183.9	176.0	160.1	188.3	113.4	133.0	101.8	119.4	121.6	141.1	141.4	
1942 .....	178.2	167.8	172.4	200.0	114.4	135.5	103.5	110.6	120.9	138.2	138.7	
1943 .....	196.6	176.9	170.2	209.3	111.7	134.9	97.3	117.9	127.0	150.0	151.8	
1944 .....	238.8	220.7	178.1	222.8	114.9	139.4	97.9	127.6	138.6	171.8	170.5	
1945 .....	294.3	269.4	189.3	245.2	125.8	161.5	103.3	141.4	146.6	167.5	166.0	
1946 .....	353.6	340.5	215.5	267.6	143.8	187.6	116.9	153.2	172.9	167.4	168.1	
1947 .....	385.7	374.0	235.1	288.2	163.3	190.6	144.4	164.0	204.4	181.2	181.4	
1948 P.....	375.1	363.7	2	2	177.2	2	161.2	2	2	199.0	199.2	
1949 P.....	366.4	355.3	2	2	183.8	2	176.2	2	2	218.0	218.2	
1950 P.....	409.4	397.0	2	2	195.3	2	186.4	2	2	243.5	243.8	
1951 P.....	383.1	371.5	2	2	194.7	2	188.9	2	2	274.9	275.2	

**Annual Net and Gross Industry Indexes — Continued**  
1935-1939=100

	Non-durable Manufactures															
	Products of Petroleum and Coal			Chemicals and Allied Products												
	Coke and Gas Products		Petroleum Products	Total		Acids, Alkalies and Salts		Fertilizers		Medicinal & Pharmaceutical Preparations	Paints, Pigments and Varnishes					
	Net	Gross	Gross	Net	Gross	Net	Gross	Net	Gross	3	Net	Gross				
1935-39 Weights.....	0.579		1.293	5.742		0.962		0.210		1.145	0.901					
1935 .....	89.8	90.3	86.6	85.7	86.9	90.8	90.0	53.0	63.9	92.5	78.0	84.0				
1936 .....	102.2	101.8	92.8	92.1	92.7	94.4	92.8	74.8	77.2	95.2	91.3	94.9				
1937 .....	108.8	108.8	102.7	107.4	107.2	108.4	110.2	105.6	104.4	106.2	114.0	108.5				
1938 .....	101.8	100.0	103.1	103.5	102.7	94.5	95.7	130.4	128.0	100.7	107.4	103.3				
1939 .....	97.3	99.0	114.8	111.3	110.5	112.0	111.4	136.2	126.4	105.4	109.3	109.3				
1940 .....	127.5	128.1	125.2	136.2	135.0	155.4	155.0	141.9	137.9	111.3	134.6	128.0				
1941 .....	133.1	134.2	144.6	210.9	208.5	256.3	249.3	134.5	126.9	124.0	170.2	163.9				
1942 .....	139.4	141.0	137.7	345.8	342.8	324.6	319.7	184.2	166.4	135.6	188.4	182.8				
1943 .....	143.4	149.2	152.9	369.3	366.8	343.5	347.5	247.0	227.7	162.6	188.2	178.0				
1944 .....	176.8	172.7	169.5	390.4	387.3	337.3	334.1	387.7	366.4	202.9	206.8	195.4				
1945 .....	172.9	167.8	165.1	292.8	289.1	304.4	292.3	409.4	389.5	218.5	193.5	185.8				
1946 .....	140.1	142.3	179.6	237.7	234.5	222.1	216.5	467.6	441.5	216.3	208.0	203.8				
1947 .....	149.6	150.0	195.4	245.5	242.4	247.9	239.9	506.3	485.8	213.9	215.6	217.3				
1948 <sup>P</sup> .....	169.7	170.2	212.1	243.2	240.1	246.9	238.9	491.6	471.7	211.5	227.9	229.7				
1949 <sup>P</sup> .....	167.2	167.6	240.8	239.5	236.5	230.3	222.9	497.7	477.5	186.5	229.8	231.6				
1950 <sup>P</sup> .....	172.0	172.5	275.6	253.7	250.5	247.6	239.6	481.2	461.7	189.8	252.1	254.1				
1951 <sup>P</sup> .....	171.9	172.4	321.1	267.8	264.4	270.8	262.1	460.8	442.1	194.6	251.9	253.9				
Non-durable Manufactures																
Chemicals and Allied Products																
	Explosives and Ammunition		Soaps and Washing Compounds		Toilet Preparations	Vegetable Oil Mills		Miscellaneous Chemical Products								
					3			Total		Inks	Polishes and Dressings	Plastics				
	Gross	Net	Gross		Net	Gross		Net	Gross	Gross	Gross	3				
1935-39 Weights.....	0.482		0.602		0.304		0.062		1.074		0.138		0.107		0.120	
1935 .....	74.4	97.8	96.6		92.7	72.9	81.3	83.8	83.8	95.3	72.4	77.5				
1936 .....	83.1	91.6	92.2		100.7	104.7	104.1	92.1	92.8	100.1	83.8	90.5				
1937 .....	106.0	98.3	100.8		110.3	109.4	118.2	107.4	107.5	100.6	103.7	110.9				
1938 .....	112.9	100.9	99.8		98.1	95.5	87.9	105.2	105.0	102.4	114.3	99.7				
1939 .....	123.6	111.5	110.5		98.1	117.5	108.5	111.4	110.8	101.6	125.7	121.3				
1940 .....	217.8	109.4	110.6		120.2	138.7	139.7	128.6	128.0	110.3	145.0	160.2				
1941 .....	695.7	125.5	127.2		150.7	202.3	205.2	159.6	158.8	134.6	178.6	171.3				
1942 .....	2,006.4	135.0	130.9		150.9	216.6	219.6	187.4	186.0	127.2	202.3	187.3				
1943 .....	2,101.3	138.6	135.3		191.2	230.3	213.2	198.3	196.7	124.6	208.4	245.1				
1944 .....	1,974.4	151.5	144.7		208.4	284.1	294.9	272.6	270.3	125.7	244.6	331.5				
1945 .....	757.7	159.8	155.4		220.7	343.0	447.1	305.6	303.5	132.7	258.7	353.6				
1946 .....	107.4	163.8	154.6		212.8	501.1	554.7	346.2	345.0	164.3	298.1	486.6				
1947 .....	124.5	179.5	167.1		193.8	554.4	566.5	339.2	338.5	167.6	263.2	527.6				
1948 <sup>P</sup> .....	2	196.2	182.6	2	2	2	2	2	2	2	2	2				
1949 <sup>P</sup> .....	2	194.2	180.8	2	2	2	2	2	2	2	2	2				
1950 <sup>P</sup> .....	2	204.2	190.1	2	2	2	2	2	2	2	2	2				
1951 <sup>P</sup> .....	2	205.7	191.5	2	2	2	2	2	2	2	2	2				

**Annual Net and Gross Industry Indexes — Continued**  
1935-1939 = 100

	Non-durable Manufactures					Durable Manufactures								
	Chemicals					Total	Wood Products							
	Miscellaneous Chemical Products						Total	Saw and Planing Mills						
	Adhesives	Compressed Gases		Miscellaneous Chemicals n.e.s.	Total			Total		Veneers and Plywood				
		Net	Gross					Net	Gross	3	Net	Gross	3	
	1935-39 Weights.....	0.067		0.221		0.421	38.999		5.940		3.752		(0.170)	
1935.....	84.6	81.5	83.7	84.8	84.6	82.7	82.8	85.3	84.9	84.4	83.9	3		
1936.....	91.6	101.4	91.1	91.5	92.7	93.1	93.2	95.8	95.8	96.3	96.2	3		
1937.....	93.0	97.3	108.8	107.8	111.2	113.2	113.6	108.0	109.1	107.8	109.5	3		
1938.....	110.8	105.7	103.5	104.0	105.5	103.2	103.0	102.2	102.0	102.7	102.4	3		
1939.....	119.9	114.0	112.9	111.9	106.0	107.9	107.5	108.8	108.3	108.8	108.1	3		
1940.....	150.1	143.0	142.1	141.3	111.0	149.7	149.6	132.1	132.1	133.5	133.5	3		
1941.....	181.9	172.5	186.6	185.4	142.0	218.5	216.7	150.2	150.4	148.5	148.8	3		
1942.....	205.9	198.8	259.4	254.7	162.6	288.1	282.9	156.0	155.8	156.5	156.2	3		
1943.....	249.9	242.0	289.8	284.3	150.4	333.0	327.7	148.4	148.2	141.3	140.8	3		
1944.....	247.5	243.7	286.7	276.7	307.8	340.1	335.3	153.4	153.4	148.0	148.0	321.8		
1945.....	228.7	220.9	267.4	259.3	393.2	262.1	259.3	155.6	155.9	149.9	150.4	301.2		
1946.....	278.9	273.2	243.5	239.3	442.6	205.1	204.0	175.0	174.7	170.7	170.2	349.2		
1947.....	255.3	259.4	284.8	280.3	403.1	233.5	233.2	195.6	196.1	195.8	196.5	467.9		
1948 <sup>P</sup> .....	2	2	2	2	2	244.4	244.1	200.7	201.2	2	2	487.6		
1949 <sup>P</sup> .....	2	2	2	2	2	246.3	246.0	202.3	202.8	2	2	451.1		
1950 <sup>P</sup> .....	2	2	2	2	2	259.1	258.8	215.1	215.6	2	2	513.6		
1951 <sup>P</sup> .....	2	2	2	2	2	285.9	285.5	220.6	221.2	2	2	581.6		
Durable Manufactures														
Wood Products									Iron and Steel Products					
Saw and Planing Mills					Furniture, Mattresses and Springs	Miscellaneous Wood Products				Total	Agricultural Implements	Boilers and Plate-work		
Sash, Door and Planing Mills	Sawmills		Hard-wood Flooring	Total		Boxes and Baskets, Wooden	Coffins and Caskets	Other n.e.s.						
3	Net	Gross	3	3	3	3	Gross	3	Net	Gross	Gross	3		
1935-39 Weights.....	0.766		2.895		0.091	1.266	0.922	0.292	0.109	0.521	11.417		0.651	0.386
1935.....	79.2	85.9	85.2	80.2	85.4	88.8	85.5	89.6	90.4	80.5	81.1	88.1	92.2	
1936.....	103.8	94.3	94.2	96.4	98.3	90.4	85.5	95.4	92.1	93.0	93.3	97.5	97.7	
1937.....	106.7	108.0	110.2	112.2	109.1	107.1	109.8	100.7	106.9	118.1	118.7	117.5	115.6	
1938.....	102.3	102.7	102.3	106.1	101.8	100.7	103.9	101.8	98.6	100.7	100.1	115.7	103.3	
1939.....	107.9	109.2	108.2	105.1	105.4	113.1	115.3	112.6	112.0	107.7	106.8	81.1	91.2	
1940.....	153.2	128.6	128.6	123.6	127.5	132.7	136.0	109.3	135.6	162.3	161.9	126.7	146.5	
1941.....	191.6	137.0	137.3	152.3	148.1	160.2	173.7	124.1	160.1	238.0	235.9	165.7	205.7	
1942.....	216.5	140.5	140.1	160.2	142.3	172.8	186.8	123.0	175.2	315.9	309.2	224.0	231.2	
1943.....	201.6	123.5	122.9	198.7	152.0	172.8	172.1	129.6	182.2	362.4	354.1	265.4	252.4	
1944.....	163.8	124.4	124.4	161.1	155.0	173.5	176.1	137.2	179.6	326.2	320.4	263.3	204.1	
1945.....	177.7	124.5	125.1	161.3	164.9	165.8	166.7	133.5	171.9	265.2	260.8	245.8	200.4	
1946.....	217.1	138.5	137.9	150.8	197.1	162.3	126.0	130.8	189.3	222.6	220.2	239.7	202.8	
1947.....	241.5	156.7	157.6	178.8	212.3	172.1	129.9	129.8	204.6	249.9	248.6	289.1	230.7	
1948 <sup>P</sup> .....	2	155.7	156.6	2	214.0	157.1	2	2	2	270.4	269.0	405.9	237.6	
1949 <sup>P</sup> .....	2	152.3	153.2	2	220.2	155.1	2	2	2	264.5	263.1	448.7	258.6	
1950 <sup>P</sup> .....	2	165.5	166.5	2	230.6	147.3	2	2	2	263.2	261.8	366.0	233.2	
1951 <sup>P</sup> .....	2	168.2	169.2	2	234.0	154.5	2	2	2	292.2	290.7	388.4	261.3	



**Annual Net and Gross Industry Indexes - Continued**  
1935-1939 = 100

	Durable Manufactures										
	Iron and Steel Products										
	Bridge and Structural Steel Work	Hardware Tools and Cutlery	Heating and Cooking Apparatus	Iron Castings		Machinery and Machine Shops	Primary Iron and Steel		Sheet Metal Products	Wire and Wire Goods	Miscellaneous Iron and Steel Products
	3	3	Gross	Net	Gross	3	Net	Gross	3	3	3
1935-39 Weights .....	0.490	0.950	0.638	1.428		2.257	2.396		1.358	0.666	0.197
1935 .....	65.5	84.7	77.4	88.5	89.8	80.0	74.3	76.6	78.2	83.1	86.6
1936 .....	91.2	92.7	97.3	95.2	96.2	92.4	88.2	88.8	98.4	88.9	87.5
1937 .....	131.2	112.2	115.6	121.9	122.5	119.8	120.6	123.2	117.9	108.8	84.8
1938 .....	111.9	99.3	101.6	100.1	98.5	101.1	99.0	97.1	94.5	100.6	86.9
1939 .....	100.2	111.0	108.1	94.3	93.0	106.8	117.8	114.1	111.0	118.6	154.1
1940 .....	212.8	166.1	137.3	142.0	137.8	189.1	174.8	175.4	132.2	139.0	221.7
1941 .....	361.8	269.9	162.7	206.7	198.4	278.0	236.7	231.8	177.9	188.6	687.8
1942 .....	475.8	341.2	158.2	218.4	200.0	314.3	326.9	306.0	225.1	173.5	2,472.5
1943 .....	571.4	406.6	166.4	210.8	187.9	349.7	317.0	290.8	225.9	177.2	4,164.3
1944 .....	407.1	337.2	163.5	186.0	174.0	313.8	280.5	259.8	219.2	171.7	4,019.9
1945 .....	308.3	284.5	180.2	184.6	177.6	280.6	260.1	243.7	203.5	180.8	1,708.1
1946 .....	232.2	286.5	201.0	179.4	169.4	271.8	192.8	187.7	191.2	164.8	464.5
1947 .....	260.4	271.1	221.1	195.6	189.1	290.3	250.3	248.0	206.7	203.2	506.4
1948 <sup>P</sup> .....	302.6	261.6	247.4	226.6	219.1	291.0	272.0	269.5	222.8	207.9	526.7
1949 <sup>P</sup> .....	293.0	201.4	251.8	249.2	240.9	277.6	266.6	264.2	217.4	197.7	426.9
1950 <sup>P</sup> .....	291.2	195.3	281.7	255.3	246.8	273.4	274.2	271.7	228.5	202.1	443.7
1951 <sup>P</sup> .....	331.8	212.6	230.8	280.6	271.3	314.9	310.6	307.7	232.5	226.9	745.1
	Durable Manufactures										
	Transportation Equipment							Non-ferrous Metal Products			
	Total	Aircraft	Motor Vehicles	Motor Vehicle Parts	Railway Rolling Stock	Ship-building and Repairs	Transportation Equipment n.e.s.	Total		Aluminum Products	
	3	3	Gross	3	3	3	3	Net	Gross	Net	Gross
1935-39 Weights .....	6.749	0.256	2.651	1.241	2.012	0.442	0.147	7.600		0.159	
1935 .....	90.0	21.3	98.0	87.5	90.0	88.7	88.6	78.5	78.3	77.2	77.1
1936 .....	93.5	31.9	95.5	95.8	99.5	81.3	97.5	91.5	91.5	94.7	94.5
1937 .....	114.3	46.0	121.3	112.1	115.5	109.9	116.6	106.5	106.7	111.5	111.3
1938 .....	101.0	125.6	95.7	101.0	103.1	111.5	95.0	109.3	109.1	107.8	106.2
1939 .....	101.3	275.1	89.4	103.6	91.9	108.5	102.4	114.3	114.5	108.6	110.9
1940 .....	165.1	564.2	147.0	136.2	119.6	347.1	119.7	138.0	138.8	200.4	204.0
1941 .....	291.8	1,692.6	200.9	247.0	168.0	762.6	153.1	193.5	188.3	335.8	259.5
1942 .....	439.9	3,473.2	240.5	330.7	199.4	1,383.5	139.7	255.3	239.5	460.2	382.7
1943 .....	562.8	5,315.9	247.3	331.0	191.1	2,193.3	138.6	284.9	270.6	565.4	465.0
1944 .....	693.7	9,453.2	217.0	293.2	182.6	2,120.1	151.9	256.2	241.2	527.3	447.0
1945 .....	453.7	5,226.2	155.1	246.8	183.9	1,387.4	174.8	193.4	185.9	455.5	471.8
1946 .....	221.5	1,233.4	119.9	194.9	171.4	557.7	194.2	160.1	158.4	571.2	581.7
1947 .....	239.5	1,005.2	168.8	232.8	167.0	579.9	211.6	182.8	184.0	643.2	652.0
1948 <sup>P</sup> .....	232.6	853.4	168.5	222.8	190.0	494.1	2	201.6	202.9	670.0	679.2
1949 <sup>P</sup> .....	243.9	1,091.6	183.2	246.5	191.7	338.7	2	200.5	201.8	649.5	658.4
1950 <sup>P</sup> .....	262.2	1,017.9	247.6	276.2	169.9	308.4	2	212.8	214.2	704.7	714.3
1951 <sup>P</sup> .....	315.0	1,879.0	263.7	290.0	187.3	403.0	2	234.7	236.2	859.8	871.6

**Annual Net and Gross Industry Indexes — Concluded**  
1935-1939 = 100

	Durable Manufactures												
	Non-ferrous Metal Products						Electrical Apparatus and Supplies	Non-metallic Mineral Products					
	Brass and Copper Products		Jewellery, Electro-Plated Ware etc.	Smelting and Refining	White Metal Alloys	Miscellaneous Non-ferrous Metal Products	Total	Total		Abrasive Products		Cement	
	Net	Gross	3	Gross	Gross	3	3	Net	Gross	Net	Gross	Gross	
1935-39 Weights .....	0.801		0.446	5.899	0.216	0.079	3.432	2.652		0.471		0.407	
1935 .....	82.6	80.3	89.9	76.8	81.8	95.1	83.8	75.7	75.8	85.8	86.5	67.4	
1936 .....	99.4	99.4	95.3	89.9	92.7	95.7	91.2	91.7	92.1	103.6	102.7	95.4	
1937 .....	105.5	108.2	105.7	106.5	107.0	105.5	118.7	117.4	117.1	131.6	132.0	118.7	
1938 .....	100.8	99.4	102.6	111.5	101.3	90.7	102.4	105.5	105.3	86.7	87.1	108.0	
1939 .....	111.7	112.8	106.4	115.3	117.2	113.0	103.8	109.8	109.7	92.3	91.7	110.5	
1940 .....	186.2	192.7	138.2	128.6	151.2	192.3	152.9	138.4	136.9	139.4	138.6	134.2	
1941 .....	377.6	343.8	169.3	162.3	251.6	346.1	225.8	184.9	182.2	222.3	218.4	163.9	
1942 .....	694.8	560.7	158.8	195.6	262.0	364.0	273.5	209.8	207.4	279.2	276.5	166.8	
1943 .....	760.8	645.3	137.8	224.7	242.9	328.4	310.5	211.6	210.1	298.5	300.8	155.1	
1944 .....	635.2	508.8	143.3	205.5	257.5	281.3	312.1	205.3	203.6	252.9	256.7	146.9	
1945 .....	415.0	340.7	171.5	152.6	279.0	355.8	258.1	195.8	194.0	223.1	224.7	151.1	
1946 .....	249.9	231.7	217.1	123.6	336.9	344.1	247.3	221.4	219.7	220.2	220.9	206.3	
1947 .....	223.2	233.3	208.5	152.3	406.6	362.6	316.8	269.8	266.5	278.6	272.3	235.8	
1948 <sup>P</sup> .....	219.0	228.9	210.6	174.5	425.3	436.9	328.5	283.7	280.2	2	2	270.8	
1949 <sup>P</sup> .....	207.1	216.5	215.8	178.0	393.2	290.8	333.8	284.4	280.9	2	2	311.4	
1950 <sup>P</sup> .....	217.7	227.6	208.2	189.6	454.7	264.4	367.6	314.6	310.8	2	2	321.9	
1951 <sup>P</sup> .....	273.9	286.3	183.2	207.7	450.3	304.4	392.3	342.1	337.9	2	2	331.1	
	Durable Manufactures												
	Non-metallic Mineral Products								Miscellaneous Manufactures				
	Cement Products		Clay Products	Glass Products	Lime and Gypsum Products		Salt	Non-metallic Mineral Products n.e.s.		Total	Brooms, Brushes and Mops	Scientific and Professional Equipment	Miscellaneous Manufactures n.e.s.
	Net	Gross	3	3	Net	Gross	Gross	Net	Gross	3	3	3	3
1935-39 Weights .....	0.100		0.387	0.492	0.288		0.077	0.430		1.209	0.159	0.288	0.762
1935 .....	37.5	37.5	76.2	80.5	76.2	75.5	91.0	72.1	72.9	88.1	84.6	88.0	88.8
1936 .....	62.5	62.5	92.0	89.9	90.2	90.8	97.4	83.6	86.8	96.1	95.2	103.0	93.8
1937 .....	129.5	129.5	113.2	116.8	110.7	109.8	103.9	109.5	107.4	104.1	107.6	104.8	103.1
1938 .....	125.1	125.1	106.8	105.7	102.0	103.7	111.7	118.7	116.4	103.5	102.1	103.2	103.9
1939 .....	145.4	145.4	111.7	107.2	120.9	120.2	96.1	116.1	116.5	108.2	110.5	101.0	110.4
1940 .....	204.8	204.8	139.8	109.2	156.5	154.8	98.6	152.6	145.6	119.4	136.6	98.4	123.7
1941 .....	213.2	212.8	160.8	160.7	185.6	187.5	120.4	217.7	204.1	170.7	161.6	226.9	151.5
1942 .....	240.0	245.1	139.8	187.0	183.9	188.9	129.2	288.1	272.2	248.2	181.7	520.0	159.9
1943 .....	192.3	190.9	117.6	193.4	200.6	202.7	131.8	301.8	288.8	314.6	174.0	810.4	157.6
1944 .....	221.6	230.0	126.4	193.6	197.7	197.7	130.6	307.5	290.9	317.1	157.4	800.0	169.0
1945 .....	312.5	308.8	146.0	201.4	196.4	196.7	130.8	230.7	218.6	275.9	171.4	534.4	200.6
1946 .....	459.0	455.9	194.2	183.9	231.3	234.5	120.4	260.6	248.0	225.0	185.5	199.2	242.9
1947 .....	576.9	563.4	210.2	240.7	272.3	271.5	140.5	329.2	319.3	233.4	189.9	206.4	252.6
1948 <sup>P</sup> .....	820.4	801.2	230.8	250.1	308.9	308.0	167.8	2	2	224.5	2	2	2
1949 <sup>P</sup> .....	879.5	858.9	239.9	238.3	311.4	310.5	166.5	2	2	261.6	2	2	2
1950 <sup>P</sup> .....	1,125.7	1,099.4	258.0	259.2	337.4	336.4	189.0	2	2	281.7	2	2	2
1951 <sup>P</sup> .....	1,263.1	1,233.5	265.8	262.4	354.4	353.4	215.6	2	2	283.2	2	2	2

1. See Table II

2. Not available on a monthly basis.

3. See notes Appendix B, I(a).

## **APPENDIX D**

### **Monthly Industry and Commodity Indexes**





# APPENDIX D

CHART XXXIX

## INDUSTRIAL PRODUCTION

MONTHLY INDEX

1935-1951



### Monthly Industry and Commodity Indexes

(1935-39 = 100)

#### Total Industrial Production

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	76.1	79.8	81.0	83.4	85.8	88.2	85.5	86.6	90.0	92.2	91.6	87.5	85.6
1936 .....	85.2	88.5	89.6	93.7	94.9	96.3	95.0	95.6	99.4	99.7	99.7	97.2	94.6
1937 .....	96.7	101.1	104.4	106.1	109.7	113.7	110.4	111.2	114.5	112.8	111.2	104.5	108.0
1938 .....	98.9	99.4	99.3	102.6	103.2	103.9	101.6	103.5	105.7	103.9	104.1	98.2	102.0
1939 .....	96.5	100.2	100.8	104.4	108.3	111.5	110.2	112.4	116.0	120.2	120.8	115.6	109.7
1940 .....	116.2	120.0	121.7	123.2	128.8	132.4	132.8	136.0	140.8	142.3	143.2	139.3	131.4
1941 .....	141.7	147.3	150.3	156.9	160.7	166.0	166.8	171.2	178.1	180.1	182.3	176.2	164.8
1942 .....	181.3	187.0	189.3	193.5	194.6	197.0	197.6	199.5	200.4	202.2	205.1	200.5	195.7
1943 .....	198.6	204.5	205.8	207.6	207.8	210.0	208.7	211.0	212.0	212.7	214.3	209.1	208.5
1944 .....	211.8	213.8	214.3	214.5	215.0	218.4	213.1	214.2	211.4	211.0	210.7	200.5	212.4
1945 .....	198.7	200.0	201.8	199.2	195.4	193.9	186.3	181.8	175.6	175.1	172.9	165.1	187.2
1946 .....	164.4	165.4	168.7	174.2	173.8	175.1	168.9	170.4	171.5	175.1	181.8	173.8	171.9
1947 .....	177.0	180.4	182.3	187.5	187.4	192.7	187.4	188.9	192.7	195.7	196.6	185.1	187.8
1948 P .....	185.1	189.8	194.3	195.5	197.1	199.2	191.8	196.3	203.5	206.0	204.9	192.4	196.3
1949 P .....	188.9	193.5	194.7	201.3	201.7	206.1	194.8	200.7	207.6	206.4	204.4	195.0	199.6
1950 P .....	189.5	198.2	199.1	206.8	208.0	219.0	211.0	207.9	225.4	227.9	228.3	216.4	211.5
1951 P .....	214.6	223.2	229.4	229.9	235.3	237.3	223.2	226.8	230.2	231.1	225.4	211.6	228.5

## Total Mining

(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	70.1	70.1	69.9	72.8	75.0	81.2	76.2	80.8	86.7	95.2	90.8	84.7	79.5
1936 .....	78.7	85.0	80.0	81.4	82.2	86.8	87.1	90.7	101.6	101.7	99.0	95.5	89.2
1937 .....	90.3	95.8	94.4	96.4	95.5	105.7	102.8	111.9	115.7	118.1	114.6	104.4	103.8
1938 .....	105.0	103.4	99.6	106.5	105.8	111.5	112.7	113.0	118.2	115.9	113.9	106.7	109.4
1939 .....	101.0	107.7	103.5	109.4	116.1	124.7	124.7	125.6	126.2	130.1	127.6	119.1	118.0
1940 .....	115.3	119.4	119.2	117.5	121.5	130.0	128.1	130.5	132.0	135.0	134.1	125.5	125.7
1941 .....	125.7	128.7	127.1	128.4	127.3	134.7	129.7	134.1	138.3	140.8	139.7	129.1	132.0
1942 .....	127.5	132.2	132.3	134.2	129.0	132.3	130.7	129.1	128.3	128.6	127.4	122.6	129.5
1943 .....	115.2	124.5	123.0	122.0	116.7	120.4	111.9	111.5	112.4	113.8	113.4	108.1	116.1
1944 .....	105.9	106.9	105.8	105.5	103.4	101.5	100.5	102.0	105.1	103.4	107.9	101.1	104.1
1945 .....	102.8	104.5	107.5	102.1	98.8	104.7	101.0	99.8	95.0	96.8	100.5	97.0	100.9
1946 .....	91.5	91.1	91.5	101.1	95.5	98.1	95.6	97.7	102.8	103.3	103.1	94.2	97.1
1947 .....	92.2	91.1	95.7	101.2	101.4	112.0	111.9	110.6	112.8	122.2	115.6	107.6	106.2
1948 .....	99.4	101.7	111.7	120.1	119.4	126.3	127.7	129.0	133.2	136.5	137.7	123.3	122.2
1949 <sup>P</sup> .....	115.5	123.0	117.8	123.1	126.8	136.5	134.9	140.2	146.7	143.1	142.7	129.7	131.7
1950 <sup>P</sup> .....	123.2	134.2	132.5	139.3	145.5	152.0	147.9	138.0	161.8	162.3	166.5	141.9	145.4
1951 <sup>P</sup> .....	142.0	142.0	142.0	144.9	166.1	177.0	169.6	175.1	178.9	182.3	169.9	151.9	161.8

## Total Metals

1935 .....	67.8	72.6	74.2	78.3	77.0	82.2	75.5	79.1	81.5	83.8	84.5	87.3	78.7
1936 .....	80.6	85.0	87.2	87.5	84.5	89.2	85.7	89.3	95.1	89.0	93.7	98.5	88.8
1937 .....	90.6	98.3	99.9	101.6	98.0	107.7	99.6	108.1	108.9	108.4	109.0	104.4	102.9
1938 .....	108.4	106.1	105.1	114.7	107.2	113.0	113.9	111.8	113.7	110.0	113.9	112.9	110.9
1939 .....	107.3	113.2	112.3	118.4	120.9	127.5	123.5	124.6	121.0	117.1	120.5	117.4	118.6
1940 .....	116.4	123.0	126.1	123.0	125.7	129.5	126.1	127.7	125.8	125.7	126.1	125.4	125.0
1941 .....	125.4	129.7	129.6	134.0	130.6	131.3	129.1	128.2	131.4	131.3	132.0	124.2	129.7
1942 .....	125.2	129.8	133.6	137.9	130.5	132.7	128.5	124.9	124.9	121.8	119.9	119.7	127.5
1943 .....	113.9	122.3	121.7	123.1	112.6	117.9	106.6	102.9	103.6	103.4	104.7	100.6	111.1
1944 .....	98.7	101.8	100.3	99.9	96.9	92.5	91.9	91.2	92.7	87.4	93.7	91.9	94.9
1945 .....	95.8	95.4	100.3	94.7	92.7	95.4	92.7	89.9	83.0	86.1	84.0	84.3	91.2
1946 .....	76.5	78.3	79.9	87.7	77.3	80.4	81.1	78.2	80.1	80.3	81.8	77.2	79.9
1947 .....	77.1	81.4	89.1	92.9	90.6	94.3	90.1	89.1	83.9	95.6	89.0	91.1	88.7
1948 .....	90.9	92.6	97.3	104.0	98.4	99.1	98.0	96.0	100.2	102.4	108.8	105.6	99.4
1949 .....	98.3	112.0	107.7	109.1	105.4	111.3	104.4	107.4	108.0	109.5	108.2	111.2	107.7
1950 .....	100.9	110.6	105.9	113.7	112.4	113.9	108.4	105.7	117.5	114.1	118.6	109.8	111.0
1951 <sup>P</sup> .....	109.7	109.6	114.3	110.1	115.0	118.7	111.0	113.5	115.6	115.3	116.8	112.5	113.5

## Gold

1935 .....	66.9	71.3	70.0	73.6	75.5	82.8	80.0	82.9	81.5	84.3	84.9	86.2	78.3
1936 .....	78.4	80.5	84.5	90.3	87.1	92.4	90.3	92.9	96.6	94.3	93.2	93.2	89.5
1937 .....	92.2	96.3	94.6	93.8	95.4	100.0	97.5	97.8	100.9	100.7	102.3	101.5	97.7
1938 .....	101.4	105.6	104.9	110.6	106.9	113.9	117.6	116.6	118.3	115.7	119.5	121.9	112.7
1939 .....	115.2	121.3	115.9	121.8	120.9	126.4	123.3	125.9	122.3	121.3	123.1	121.8	121.6
1940 .....	119.4	122.0	125.1	121.8	124.5	131.2	128.6	131.2	128.2	131.6	130.9	126.7	126.8
1941 .....	122.1	128.5	125.5	132.1	126.3	131.9	128.4	131.3	129.3	129.6	128.6	117.8	127.6
1942 .....	114.7	117.6	124.2	127.2	120.2	124.0	120.1	113.9	110.6	107.9	106.0	101.8	115.7
1943 .....	93.7	101.5	97.5	96.8	87.9	94.6	82.0	81.9	81.7	78.5	77.6	73.7	87.3
1944 .....	72.7	77.4	75.2	73.8	72.4	69.9	66.4	66.8	68.9	64.9	65.0	64.6	69.8
1945 .....	66.4	67.1	67.3	65.9	62.0	62.5	59.9	60.4	62.3	65.5	65.0	68.3	64.4
1946 .....	66.8	71.2	69.6	71.4	67.4	67.9	67.1	64.8	66.6	67.5	66.9	64.3	67.6
1947 .....	65.7	69.2	74.0	76.4	75.3	78.0	73.3	73.1	71.7	72.5	73.0	77.0	73.3
1948 .....	76.8	78.6	83.6	83.2	81.1	84.3	83.2	85.9	85.7	86.3	90.5	92.0	84.3
1949 .....	87.2	95.8	96.4	98.2	93.1	99.5	91.5	100.7	105.4	102.5	104.9	104.3	98.3
1950 .....	98.9	108.0	106.9	110.3	104.3	106.4	102.7	105.1	105.3	105.2	109.2	106.9	105.8
1951 .....	104.7	107.4	107.6	104.9	103.2	104.8	96.3	96.5	103.6	105.8	107.6	105.1	104.0



## Silver

(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	71.9	64.5	73.3	62.2	94.6	89.6	67.3	92.7	79.2	75.2	94.8	97.8	80.3
1936 .....	69.4	75.7	83.7	89.4	81.1	98.3	103.2	97.3	79.6	90.8	98.8	105.3	88.7
1937 .....	79.5	84.4	99.4	88.3	77.3	140.3	159.5	173.8	139.0	116.0	96.1	78.4	111.0
1938 .....	88.6	90.1	97.7	95.1	88.9	165.7	147.0	121.3	99.0	100.4	100.2	95.2	107.4
1939 .....	88.5	81.9	93.5	90.5	104.5	171.6	157.9	134.7	118.1	97.2	101.2	103.0	111.9
1940 .....	99.1	108.4	110.8	109.7	119.8	191.8	122.5	107.5	111.3	100.4	105.9	98.5	115.5
1941 .....	94.6	91.3	109.5	96.4	115.6	129.2	112.5	100.9	102.1	99.7	105.6	104.6	105.2
1942 .....	91.6	97.5	95.6	102.6	96.7	94.5	117.0	89.5	108.2	111.4	99.8	97.3	100.1
1943 .....	92.1	103.0	101.6	102.5	83.9	81.7	76.6	73.8	68.9	73.4	80.3	71.7	84.1
1944 .....	69.1	78.1	78.3	75.3	59.1	68.8	61.4	47.6	53.7	60.5	70.6	70.4	66.1
1945 .....	58.7	60.7	71.4	62.7	69.0	65.4	54.8	60.8	57.2	59.7	65.2	66.3	62.7
1946 .....	66.6	63.8	53.5	69.0	57.4	67.0	70.1	65.7	54.5	51.5	48.1	56.6	60.7
1947 .....	47.4	61.2	64.7	56.2	57.4	69.2	63.5	65.6	58.9	64.6	60.9	56.8	60.5
1948 .....	60.5	69.8	71.6	71.0	67.6	77.8	112.4	95.6	80.1	87.0	72.8	68.7	77.9
1949 .....	56.3	61.9	74.9	76.9	80.9	122.4	93.6	64.5	63.9	102.2	83.9	92.7	81.2
1950 .....	66.2	85.1	98.2	86.6	97.2	112.8	124.9	122.9	121.2	132.6	107.6	102.8	104.8
1951 .....	107.1	93.5	96.3	80.5	98.5	132.3	95.4	106.6	104.1	105.4	108.5	104.5	102.7

## Copper

1935 .....	77.1	85.3	87.1	95.6	82.4	84.7	71.3	75.0	80.7	81.5	82.1	84.1	82.2
1936 .....	79.2	81.2	84.3	87.6	81.2	74.2	66.2	81.8	86.2	80.0	88.3	100.7	82.6
1937 .....	85.8	97.9	99.5	100.0	95.8	101.3	96.1	102.5	114.4	119.5	120.7	113.4	103.9
1938 .....	117.4	115.9	107.6	114.2	108.4	112.3	111.2	110.3	116.1	110.5	109.8	111.1	112.1
1939 .....	108.9	102.8	117.7	120.5	125.5	130.1	115.8	124.7	120.8	117.5	125.8	121.3	119.3
1940 .....	117.5	124.6	133.9	138.8	138.0	130.5	120.3	124.7	122.6	132.6	128.5	131.0	128.6
1941 .....	126.1	127.5	136.3	130.0	128.4	118.3	119.5	120.8	126.0	127.1	129.7	124.2	126.2
1942 .....	119.1	124.8	128.9	128.1	119.5	120.2	113.5	117.2	118.4	112.1	112.3	107.1	118.4
1943 .....	105.7	120.8	121.8	130.2	114.2	110.0	109.0	106.5	101.2	112.5	113.0	109.9	112.9
1944 .....	112.9	113.1	111.3	111.1	109.8	112.4	103.8	103.3	102.8	97.1	104.6	105.8	107.3
1945 .....	101.6	101.1	108.6	101.5	94.1	105.0	97.0	90.3	82.8	80.4	76.2	79.9	93.2
1946 .....	72.4	69.1	73.5	77.4	70.4	71.3	70.5	68.0	67.6	69.3	83.1	73.3	72.2
1947 .....	66.1	76.7	98.1	97.7	94.7	91.7	90.3	82.6	83.1	103.7	90.1	87.3	88.5
1948 .....	93.9	93.9	100.1	99.3	95.3	97.4	89.6	83.7	93.5	94.0	96.6	96.2	94.5
1949 .....	96.0	110.0	101.0	111.2	99.9	96.6	98.9	94.6	94.9	92.5	94.7	98.2	99.0
1950 .....	91.4	104.0	92.7	98.8	92.8	87.6	88.5	88.5	89.8	92.2	100.4	94.4	93.4
1951 .....	94.6	93.2	104.1	102.1	97.4	96.8	93.2	93.9	93.2	86.7	94.8	91.5	95.1

## Nickel

1935 .....	57.0	59.2	64.5	76.9	68.8	73.2	61.8	66.0	80.9	81.1	76.2	91.1	71.4
1936 .....	85.5	105.0	95.3	71.7	71.8	88.4	76.4	75.2	99.8	77.5	94.6	109.6	87.6
1937 .....	97.9	116.7	113.9	126.8	111.7	131.1	95.6	125.1	119.0	111.9	123.5	119.3	116.0
1938 .....	122.9	107.5	104.9	132.6	112.9	102.3	105.5	100.3	116.0	97.7	110.8	100.8	108.7
1939 .....	38.6	117.4	108.5	119.6	130.9	126.0	119.2	122.0	127.0	114.3	118.5	107.7	116.6
1940 .....	123.5	140.9	133.8	121.3	127.2	118.1	126.1	130.5	132.2	115.1	121.3	130.6	126.7
1941 .....	145.3	149.9	139.9	152.5	148.0	145.9	145.0	139.4	146.8	144.2	144.5	145.5	145.6
1942 .....	143.9	149.7	148.6	154.7	146.9	152.0	149.9	144.1	145.2	139.4	134.5	155.9	147.1
1943 .....	153.4	155.3	158.0	165.8	148.4	161.0	142.8	129.2	140.8	138.7	145.0	145.3	148.6
1944 .....	143.0	145.3	153.6	150.4	145.8	127.9	142.1	144.7	142.5	132.5	139.7	132.2	141.6
1945 .....	143.2	138.4	146.4	134.9	141.6	141.1	144.0	132.6	102.8	103.9	96.5	92.1	126.5
1946 .....	84.7	84.5	96.1	121.1	90.3	96.3	99.6	94.6	101.1	105.6	110.7	104.2	99.1
1947 .....	118.2	115.4	121.7	130.2	120.2	123.6	119.0	120.5	95.2	139.6	124.1	138.9	122.2
1948 .....	131.5	126.3	131.9	166.4	138.6	130.9	126.9	109.9	124.1	125.3	160.0	159.0	137.9
1949 .....	136.6	146.9	154.0	144.2	136.3	133.6	117.1	121.2	120.3	131.1	121.9	130.4	132.8
1950 .....	124.0	128.8	112.9	145.4	133.5	135.4	113.5	93.4	146.6	125.3	149.0	125.0	127.7
1951 .....	132.2	129.3	145.2	131.9	150.7	147.8	142.3	148.0	145.2	141.5	143.9	136.8	141.2

**Lead**  
(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	69.0	92.2	96.0	80.6	81.4	85.9	88.5	80.5	82.7	99.7	101.7	89.9	87.3
1936 .....	85.2	88.0	94.9	109.1	97.2	89.4	98.0	103.0	91.3	85.7	120.1	122.5	98.7
1937 .....	102.3	94.3	109.0	108.7	102.3	103.7	94.5	122.6	127.4	122.8	105.4	79.5	106.0
1938 .....	113.4	89.7	106.4	114.4	97.9	118.3	117.1	120.5	111.5	116.5	94.6	92.8	107.8
1939 .....	97.9	88.8	98.8	100.0	97.1	103.2	96.9	103.3	102.1	107.5	107.6	96.7	100.0
1940 .....	104.5	109.1	126.7	129.0	128.7	130.4	115.3	119.0	127.4	121.9	126.4	120.2	121.5
1941 .....	117.0	112.7	122.9	118.7	121.7	116.7	116.1	94.0	125.7	127.4	137.1	111.8	118.5
1942 .....	121.0	130.7	126.0	144.0	143.7	134.0	110.7	125.3	137.9	137.7	143.4	129.2	132.0
1943 .....	116.7	129.9	141.9	118.8	122.8	123.7	109.1	97.1	102.7	106.7	108.2	96.0	114.5
1944 .....	99.6	97.0	73.9	82.3	62.4	62.2	74.7	55.8	59.5	55.9	112.3	107.2	78.6
1945 .....	76.9	81.7	109.0	87.4	76.7	78.1	76.5	84.3	90.5	98.4	109.0	103.9	89.4
1946 .....	102.0	101.1	93.6	98.7	90.0	95.7	94.8	90.1	89.9	89.0	70.2	79.5	91.2
1947 .....	77.3	86.0	88.6	84.9	78.9	91.1	86.4	83.7	84.2	78.6	93.0	67.2	83.3
1948 .....	68.3	85.6	79.6	81.9	78.7	70.9	88.3	102.6	96.1	97.4	100.5	83.3	86.1
1949 .....	65.0	70.9	59.1	72.6	81.8	67.1	50.4	58.0	60.5	60.9	63.7	101.9	67.7
1950 .....	43.5	55.2	59.6	51.4	61.8	68.6	76.7	65.9	72.5	85.0	81.6	53.4	64.6
1951 .....	73.8	60.9	59.9	47.7	51.0	65.4	50.5	63.3	56.3	69.0	70.0	71.3	61.6

**Zinc**

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	81.3	74.6	88.2	82.6	89.6	95.2	90.2	94.3	91.4	89.9	97.5	92.7	89.0
1936 .....	89.7	72.4	86.1	83.0	97.1	101.5	113.8	109.7	105.4	103.7	77.0	69.8	92.4
1937 .....	62.6	71.9	104.3	109.7	100.6	119.0	118.8	123.5	101.6	121.5	102.1	96.4	102.7
1938 .....	114.9	104.8	109.3	117.6	114.7	106.4	92.5	96.5	99.1	95.2	117.3	104.1	106.0
1939 .....	99.3	91.0	86.6	101.9	96.3	123.6	172.8	129.3	100.5	97.2	99.1	115.1	109.4
1940 .....	97.3	108.4	110.3	105.2	106.8	122.6	157.6	136.9	117.2	116.6	116.6	116.8	117.7
1941 .....	121.0	125.6	135.8	150.6	146.0	141.6	146.2	142.1	149.8	149.3	149.8	149.2	142.2
1942 .....	153.3	156.0	156.4	170.0	159.1	155.2	154.2	158.8	160.0	170.3	169.5	171.4	161.2
1943 .....	171.4	173.7	176.4	176.8	175.0	179.8	171.5	169.8	162.2	152.7	158.3	168.5	169.7
1944 .....	161.7	162.9	156.7	157.8	155.3	139.9	139.2	146.7	158.7	140.9	151.1	166.0	153.1
1945 .....	161.0	160.2	160.3	145.7	147.7	146.0	147.0	134.9	129.2	126.3	136.4	130.7	143.8
1946 .....	135.0	142.5	138.9	143.8	132.3	131.2	127.9	126.7	128.9	119.2	123.8	120.0	130.8
1947 .....	111.1	112.4	107.4	123.1	113.9	117.3	114.2	105.9	117.3	117.9	122.6	123.1	115.5
1948 .....	111.1	121.3	124.3	130.7	132.5	127.3	140.9	134.2	133.7	144.6	141.7	118.8	130.1
1949 .....	142.0	143.3	152.2	119.6	134.8	154.1	155.0	140.8	128.4	140.1	139.7	148.5	141.5
1950 .....	131.6	135.8	137.0	138.3	168.2	151.0	142.0	141.4	164.6	145.7	146.4	148.5	145.9
1951 .....	140.6	152.7	146.9	144.8	141.5	153.1	151.5	165.0	158.9	158.1	163.0	159.5	153.0

**Total Non-Metals**

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	37.2	46.4	43.6	59.2	72.0	69.0	68.0	89.4	82.1	99.6	101.1	59.6	68.9
1936 .....	55.1	59.7	55.4	73.4	101.5	92.6	106.1	94.6	114.3	140.3	137.7	76.9	92.3
1937 .....	75.5	97.9	110.4	146.3	137.6	137.2	127.7	135.9	147.6	125.7	136.5	99.9	123.3
1938 .....	62.0	49.5	77.6	99.5	125.1	111.9	101.7	104.5	117.6	135.6	119.7	71.3	98.0
1939 .....	68.3	80.5	77.5	98.7	110.3	112.9	116.8	138.0	151.6	173.2	158.6	123.4	117.5
1940 .....	99.8	88.7	98.2	115.9	112.1	121.5	125.0	132.1	137.3	141.5	137.5	114.4	118.8
1941 .....	107.1	121.6	115.3	123.1	139.8	176.3	162.7	178.7	176.0	159.6	168.3	158.1	148.9
1942 .....	116.4	132.5	137.5	130.5	144.8	145.4	143.6	153.4	137.5	144.0	150.0	118.4	137.7
1943 .....	121.6	142.3	143.2	130.7	175.8	153.9	155.1	150.8	148.3	131.4	146.9	132.2	144.5
1944 .....	131.2	139.8	144.6	149.3	139.9	145.4	132.3	148.6	154.7	152.7	145.9	131.2	142.9
1945 .....	115.3	152.5	185.3	168.4	154.8	160.8	150.2	158.3	167.0	146.0	151.5	130.3	153.4
1946 .....	130.1	117.1	136.3	185.4	188.7	182.3	160.8	187.6	193.1	195.4	191.9	175.4	170.4
1947 .....	145.7	152.5	189.8	196.1	186.8	191.1	187.6	196.2	216.1	198.9	224.0	184.5	189.2
1948 .....	148.1	164.4	184.0	198.1	208.0	205.0	213.9	226.0	241.2	239.9	238.3	184.4	204.3
1949 .....	166.3	114.0	68.3	86.0	116.8	131.8	230.1	240.1	253.9	247.6	261.3	188.7	175.4
1950 <sup>P</sup> .....	201.2	227.0	210.3	246.8	236.7	232.8	211.4	270.2	287.5	303.0	291.2	248.7	247.2
1951 <sup>P</sup> .....	235.5	249.4	273.6	275.7	280.0	303.4	272.5	284.8	294.7	291.2	272.6	229.5	271.9



**Gypsum**  
(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	4.5	4.9	6.1	37.9	77.1	107.8	121.0	107.3	68.9	78.3	92.9	29.1	61.3
1936 .....	5.9	3.9	6.6	52.4	96.3	138.1	160.5	203.0	110.0	190.8	99.0	71.8	86.5
1937 .....	10.5	6.5	28.8	81.3	140.8	200.9	150.2	144.6	181.9	142.0	118.0	85.2	107.6
1938 .....	7.9	7.7	8.5	65.1	139.7	200.0	173.8	175.3	150.6	121.4	123.1	100.4	106.1
1939 .....	36.1	24.2	33.3	94.4	133.7	160.2	190.1	212.3	222.3	212.5	195.5	146.9	138.5
1940 .....	80.1	72.2	60.5	82.0	158.9	235.8	190.2	207.0	227.5	201.5	155.1	111.5	148.5
1941 .....	92.4	100.2	92.0	132.3	167.9	201.2	197.1	189.9	244.8	224.2	209.9	160.2	167.7
1942 .....	102.2	94.8	95.4	110.3	110.6	83.7	98.7	75.0	69.2	75.1	83.6	72.9	89.3
1943 .....	71.4	74.0	81.6	83.6	72.2	74.6	80.3	95.8	97.1	103.4	93.0	78.7	83.8
1944 .....	88.1	96.3	99.4	98.5	92.4	97.8	115.0	127.5	104.7	97.4	90.5	74.1	98.5
1945 .....	52.2	61.5	69.6	71.3	90.8	150.7	127.9	138.8	189.1	195.0	162.8	97.5	117.3
1946 .....	73.2	85.6	122.9	180.3	201.6	221.2	247.8	282.9	313.5	318.5	297.5	176.7	210.1
1947 .....	158.5	166.4	189.7	173.7	234.7	348.6	353.9	388.8	455.6	321.2	337.7	231.9	280.0
1948 .....	209.5	139.8	183.1	311.6	355.1	421.1	520.8	459.7	438.3	503.3	390.3	259.2	349.3
1949 .....	247.2	233.0	203.7	280.9	369.0	374.0	434.3	431.4	473.9	483.3	354.7	271.0	346.4
1950 <sup>P</sup> .....	255.0	240.6	259.4	308.3	374.7	459.4	479.0	540.9	531.9	570.0	513.0	310.5	403.6
1951 <sup>P</sup> .....	229.3	238.5	220.4	284.4	314.5	422.8	554.0	553.3	580.1	502.1	356.6	201.0	371.4

**Asbestos**

1935 .....	38.7	49.1	45.2	58.4	68.3	60.9	56.7	85.1	80.8	99.7	97.5	60.9	66.8
1936 .....	59.3	64.2	58.7	73.8	99.0	83.7	96.8	90.9	112.4	133.3	139.6	75.5	90.6
1937 .....	84.0	110.7	122.5	158.2	140.8	132.3	126.9	138.1	146.8	125.2	140.8	103.4	127.5
1938 .....	68.0	53.3	86.6	103.3	125.1	101.7	94.2	96.5	114.1	138.2	118.9	67.9	97.3
1939 .....	72.8	89.1	84.7	100.6	109.8	109.3	111.3	134.0	147.9	173.1	157.4	123.9	117.8
1940 .....	97.5	84.3	98.5	115.7	100.2	101.7	111.0	116.9	120.3	127.0	127.9	110.0	109.2
1941 .....	106.3	120.4	114.5	117.5	132.5	168.9	152.9	172.6	162.9	146.6	157.8	154.0	142.2
1942 .....	106.2	123.7	129.6	119.7	133.8	137.9	133.9	148.4	130.9	137.6	141.2	110.2	129.4
1943 .....	114.6	138.0	136.7	122.1	172.1	153.2	148.6	141.1	138.3	119.4	137.4	124.0	137.1
1944 .....	110.6	117.5	122.2	126.8	118.8	122.8	108.1	123.4	131.9	130.6	124.8	113.1	120.9
1945 .....	106.0	142.3	175.4	156.6	139.9	137.2	130.6	137.5	140.6	119.4	127.2	113.8	135.5
1946 .....	121.6	102.4	120.9	169.7	171.5	158.3	139.5	166.3	167.5	168.3	162.0	154.9	150.3
1947 .....	129.2	138.3	175.5	179.2	167.2	153.9	152.8	157.7	172.4	168.9	195.9	165.6	168.1
1948 .....	131.1	156.4	178.1	180.2	183.1	165.2	165.3	187.0	205.7	195.3	208.7	166.3	176.9
1949 .....	145.1	80.2	31.5	46.6	70.1	83.3	199.4	208.1	216.6	209.8	241.4	169.4	141.8
1950 <sup>P</sup> .....	189.9	212.0	198.3	230.6	211.7	192.9	168.7	233.1	245.5	258.9	251.8	228.9	218.5
1951 <sup>P</sup> .....	225.5	237.8	271.3	264.6	265.6	259.8	221.1	236.0	243.8	251.1	247.2	219.8	245.3

**Salt**

1935 .....	59.2	65.4	74.2	95.0	94.2	86.2	104.1	80.4	97.0	96.0	113.5	71.3	86.4
1936 .....	61.3	70.9	76.2	86.2	121.4	101.9	100.1	100.2	100.1	104.9	132.0	79.2	94.5
1937 .....	81.8	83.9	87.3	125.5	120.3	121.9	116.2	110.2	126.3	131.5	138.4	83.3	110.6
1938 .....	68.2	75.7	74.1	125.1	115.6	123.7	99.3	104.0	122.4	140.2	144.2	78.7	105.9
1939 .....	70.6	66.3	69.2	106.9	108.5	112.0	99.1	103.1	117.9	145.6	142.2	88.4	102.5
1940 .....	86.4	87.9	86.3	103.8	131.1	123.9	115.8	113.8	115.2	134.6	141.5	104.1	112.0
1941 .....	93.6	105.1	101.2	127.7	126.3	149.3	152.3	144.0	157.8	160.6	169.4	143.4	135.9
1942 .....	131.2	149.0	139.9	147.6	172.4	162.3	165.8	148.6	165.7	159.6	191.0	154.6	157.3
1943 .....	151.5	146.3	147.3	165.2	172.8	164.2	168.4	171.7	173.7	174.3	179.9	162.1	164.8
1944 .....	168.4	163.9	168.5	185.3	177.9	175.5	172.1	165.5	164.7	164.9	169.8	143.2	168.3
1945 .....	135.2	148.2	152.7	172.1	173.7	183.0	174.5	165.7	170.7	151.3	161.7	152.4	161.8
1946 .....	155.4	170.6	174.3	176.1	162.7	172.4	77.7	42.3	55.9	70.2	127.4	168.4	129.5
1947 .....	178.8	182.2	179.6	195.0	176.4	188.8	183.0	173.2	157.2	175.6	191.3	165.3	178.9
1948 .....	149.4	175.4	160.6	168.0	166.5	190.2	178.0	176.7	194.7	194.7	206.1	172.1	177.7
1949 .....	176.7	178.7	150.1	172.6	165.7	185.8	180.2	179.0	206.4	199.1	208.4	171.5	181.2
1950 <sup>P</sup> .....	176.2	199.0	186.3	199.9	210.5	207.6	187.1	186.0	238.8	226.8	248.0	220.0	207.2
1951 <sup>P</sup> .....	216.9	240.7	226.0	223.3	215.9	229.1	242.4	234.7	240.1	237.3	263.5	227.1	233.1



## Total Fuels

(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	106.2	84.7	78.5	71.1	66.5	68.3	66.1	66.2	80.0	103.3	112.2	96.2	83.3
1936 .....	99.2	115.5	78.8	75.4	73.6	74.9	73.8	75.1	100.0	120.4	110.6	107.1	92.0
1937 .....	112.5	107.6	88.9	79.6	81.5	80.1	82.1	91.8	106.4	127.1	128.2	126.4	101.0
1938 .....	125.2	129.3	103.8	86.8	90.8	84.0	81.6	95.7	109.5	125.9	124.7	114.1	106.0
1939 .....	110.2	119.4	100.1	99.0	102.6	106.5	105.8	110.6	118.6	148.7	147.4	141.8	117.6
1940 .....	142.5	142.6	126.9	118.7	111.3	107.4	113.7	121.5	127.9	144.0	166.5	149.7	131.1
1941 .....	154.2	151.4	145.1	125.3	113.4	114.2	110.4	124.4	139.4	154.6	165.1	158.5	138.0
1942 .....	164.5	167.4	148.7	144.5	123.9	125.2	126.3	128.2	129.7	133.8	148.7	149.0	140.8
1943 .....	140.0	148.2	142.7	131.6	120.2	119.9	116.3	122.9	125.5	133.7	131.6	137.9	130.9
1944 .....	143.2	137.0	134.7	126.7	114.3	112.7	105.7	115.9	122.7	132.0	142.9	138.5	127.2
1945 .....	143.2	142.2	127.0	117.5	104.3	109.0	96.4	99.6	105.2	103.7	141.7	129.0	118.2
1946 .....	142.2	144.6	129.0	119.8	112.4	108.8	95.4	108.6	119.2	125.0	128.7	128.5	121.9
1947 .....	135.5	111.4	93.6	88.2	82.1	100.0	97.8	101.1	122.4	132.2	146.7	142.5	112.8
1948 .....	121.6	119.3	143.4	141.5	129.9	137.0	136.3	139.4	146.0	160.4	173.1	164.9	142.7
1949 .....	172.5	178.4	173.4	164.3	159.4	156.8	145.5	156.3	194.6	196.7	205.3	181.4	173.7
1950P .....	187.9	203.0	213.0	181.4	170.6	177.2	178.3	162.5	206.6	226.5	250.7	218.0	198.0
1951P .....	236.9	235.0	201.0	200.5	263.0	278.5	264.5	283.3	294.8	302.0	286.0	260.2	258.8

## Coal

1935 .....	116.8	88.0	82.9	74.1	71.2	77.1	75.5	76.0	92.7	119.9	129.5	103.2	92.2
1936 .....	107.1	124.1	82.1	78.0	79.9	82.9	82.0	84.4	115.7	139.2	122.0	115.2	101.1
1937 .....	120.2	111.7	89.2	79.5	86.6	86.2	88.5	99.6	114.0	137.4	134.0	124.1	105.9
1938 .....	117.4	121.9	94.0	72.4	81.4	74.7	65.9	77.9	89.1	120.0	123.9	103.9	95.2
1939 .....	97.0	114.0	92.0	80.5	89.0	90.0	89.4	99.5	111.6	144.8	140.2	119.7	105.6
1940 .....	135.5	125.9	113.3	103.3	99.2	98.1	98.1	109.4	115.6	135.6	152.5	135.7	118.5
1941 .....	137.6	130.7	124.3	102.9	94.6	98.5	94.0	112.8	128.4	147.3	152.7	140.5	122.0
1942 .....	147.9	148.4	128.8	126.7	105.3	110.9	115.4	117.4	117.6	121.4	136.9	134.1	125.9
1943 .....	122.3	134.1	127.6	113.2	103.4	107.2	104.8	113.2	114.7	123.1	115.5	123.0	116.8
1944 .....	128.7	119.7	117.8	106.0	98.4	97.6	92.5	105.2	110.1	120.9	129.7	121.7	112.3
1945 .....	126.0	126.2	113.7	106.2	89.5	98.9	84.5	89.4	95.6	90.9	138.6	119.6	106.6
1946 .....	135.5	138.3	123.5	110.0	104.5	101.8	86.5	104.3	115.6	121.8	122.9	122.4	115.6
1947 .....	130.4	94.4	75.0	67.9	63.5	89.8	89.0	93.3	118.6	128.1	139.5	130.6	101.7
1948 .....	99.7	93.2	127.3	129.9	112.6	115.4	110.2	111.4	124.6	137.6	147.6	135.9	120.6
1949 .....	140.5	136.8	126.9	105.5	111.1	109.0	94.8	99.3	135.4	145.1	158.9	130.9	124.4
1950P .....	130.7	142.9	144.5	114.6	115.1	111.6	94.8	81.3	115.2	135.0	150.1	138.7	122.9
1951P .....	139.1	132.4	115.8	117.3	107.6	107.3	90.5	96.0	119.6	132.9	149.1	124.7	119.4

## Petroleum

1935 .....	35.3	34.7	33.8	34.7	35.6	35.3	34.7	34.4	36.4	35.0	34.4	35.6	35.0
1936 .....	34.3	32.3	33.1	33.1	32.6	33.7	40.4	40.4	39.8	38.7	38.1	39.5	36.3
1937 .....	39.5	47.7	51.2	54.4	54.1	60.5	68.6	81.7	87.8	95.9	98.8	114.2	71.2
1938 .....	130.2	129.9	136.9	141.0	161.3	158.4	199.7	234.9	262.5	195.9	131.1	139.0	168.4
1939 .....	151.5	112.8	109.6	170.1	202.9	241.0	255.5	226.2	211.6	231.7	214.5	143.0	189.2
1940 .....	135.5	196.3	164.4	183.6	189.6	190.2	246.8	244.2	244.5	229.6	259.9	207.1	207.7
1941 .....	228.0	232.1	241.7	249.8	239.6	240.2	249.2	247.5	258.2	247.5	251.5	254.7	245.0
1942 .....	248.5	266.0	261.9	257.0	253.2	251.4	246.5	246.8	242.4	243.9	245.9	243.9	250.6
1943 .....	243.0	243.9	243.3	252.6	246.2	241.0	239.2	242.4	241.3	242.7	243.3	237.2	243.0
1944 .....	236.5	239.7	247.8	254.8	242.3	240.9	229.2	235.6	250.5	249.9	251.6	250.2	244.1
1945 .....	247.6	242.2	226.4	201.0	201.0	195.0	195.6	192.1	190.7	191.9	191.0	187.2	205.1
1946 .....	192.3	191.2	188.0	194.8	183.9	181.8	179.5	176.3	182.7	180.7	181.3	168.0	183.4
1947 .....	168.9	167.4	170.0	181.8	179.2	180.1	178.5	182.7	190.3	201.8	213.6	217.1	186.0
1948 .....	220.0	235.9	239.1	233.0	259.5	303.9	333.9	352.4	322.1	341.4	370.0	353.2	297.0
1949 .....	382.0	449.1	491.6	554.1	483.0	495.1	499.9	555.0	630.7	579.8	557.3	502.0	515.0
1950 .....	547.2	613.6	694.1	620.9	556.8	640.7	742.5	701.3	800.9	846.5	936.5	739.3	703.4
1951P .....	851.1	881.0	731.8	718.8	1,270.9	1,396.3	1,402.1	1,512.0	1,445.6	1,386.7	1,205.3	1,130.4	1,161.0

## Natural Gas

(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	117.6	119.6	100.3	92.4	71.9	50.5	42.7	40.8	49.0	74.9	89.4	119.2	80.7
1936 .....	119.5	151.7	106.9	104.5	78.1	69.0	57.9	53.6	66.3	90.8	117.4	129.4	95.4
1937 .....	144.7	149.0	129.1	108.8	80.0	64.3	57.5	55.1	80.0	97.3	125.2	154.7	103.7
1938 .....	169.0	175.2	130.1	118.2	73.4	62.3	52.1	56.7	71.3	87.7	123.2	151.8	105.9
1939 .....	158.5	172.0	150.5	147.2	88.0	74.0	56.4	64.7	73.2	97.8	134.6	154.3	114.3
1940 .....	194.5	189.2	171.9	144.8	102.6	75.9	66.8	64.3	78.9	104.1	153.1	175.6	126.8
1941 .....	177.4	193.0	169.9	129.9	93.5	75.5	61.6	63.0	78.9	98.9	149.2	166.5	121.4
1942 .....	176.7	178.7	149.7	133.3	99.5	75.9	63.6	56.6	82.4	91.4	117.0	138.5	114.5
1943 .....	139.2	132.6	128.0	116.1	88.9	58.3	55.3	54.8	68.1	82.1	111.1	123.7	97.4
1944 .....	132.3	133.6	117.6	117.0	74.7	67.2	54.2	52.6	62.7	73.3	107.5	124.0	93.1
1945 .....	136.8	133.7	102.0	97.4	91.5	78.9	62.7	62.7	72.3	88.4	107.2	124.1	96.5
1946 .....	129.4	133.3	99.4	99.3	83.6	73.0	59.8	61.7	72.9	84.6	107.9	123.4	94.0
1947 .....	130.7	156.3	126.3	113.8	92.2	76.5	64.9	61.2	72.4	82.3	119.1	135.4	102.6
1948 .....	149.6	153.8	138.2	113.0	95.7	89.0	83.0	81.3	86.8	105.9	116.9	139.6	112.7
1949 .....	146.1	145.1	119.0	109.5	99.7	89.3	78.2	80.4	91.7	104.0	113.9	149.8	110.6
1950 <sup>P</sup> .....	155.5	133.4	118.6	122.2	99.8	84.5	87.8	84.9	107.2	126.0	135.3	148.1	116.9
1951 <sup>P</sup> .....	182.4	179.9	156.8	157.5	139.7	133.8	115.8	118.5	139.1	180.1	143.6	162.3	150.8

CHART XL

## MANUFACTURING INDUSTRIES

MONTHLY INDEXES

1935-1951



## Total Manufactures

(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	76.0	80.8	82.7	85.0	88.0	90.0	87.9	88.1	90.7	91.1	91.0	87.2	86.5
1936 .....	85.7	88.7	91.1	95.4	97.8	98.5	97.0	97.1	99.4	99.1	99.3	96.9	95.5
1937 .....	97.4	101.7	106.0	108.1	113.5	116.4	113.3	112.3	115.4	112.4	110.5	104.1	109.3
1938 .....	97.2	98.2	99.0	102.0	103.5	103.3	100.3	102.3	103.4	101.2	101.4	95.6	100.6
1939 .....	94.6	97.6	99.8	103.3	107.0	109.3	108.1	110.5	114.3	118.5	119.4	115.2	108.1
1940 .....	116.8	120.8	123.2	125.7	131.3	134.3	135.4	139.6	145.7	147.0	147.8	144.7	134.4
1941 .....	147.7	154.2	158.8	166.1	171.7	177.7	179.8	184.8	191.5	193.0	195.4	190.1	175.9
1942 .....	197.0	203.5	206.4	211.2	214.4	216.9	218.8	221.6	222.6	224.5	228.1	223.2	215.7
1943 .....	222.5	227.9	229.9	231.7	233.2	235.3	235.7	238.8	239.7	240.5	242.1	236.5	234.5
1944 .....	240.7	243.1	244.1	244.4	245.4	250.8	245.3	246.0	241.2	240.5	238.7	227.6	242.3
1945 .....	224.5	225.6	226.4	224.4	220.4	217.3	209.3	203.9	196.9	195.2	191.3	182.1	209.8
1946 .....	181.6	182.5	186.9	191.1	192.5	194.0	186.9	188.4	188.9	192.7	201.0	192.4	189.9
1947 .....	196.4	200.4	202.2	207.7	208.0	212.7	206.4	209.2	213.3	214.5	217.6	204.2	207.7
1948 <sup>P</sup> .....	205.7	211.4	214.6	214.6	216.0	218.2	209.1	214.6	223.0	225.3	223.5	210.4	215.5
1949 <sup>P</sup> .....	207.4	211.4	213.8	219.1	219.6	223.9	211.1	217.6	224.8	223.5	220.6	211.0	217.0
1950 <sup>P</sup> .....	205.0	213.5	215.2	223.0	223.2	236.2	227.7	225.9	243.4	246.0	244.5	233.9	228.1
1951 <sup>P</sup> .....	231.0	242.0	249.5	249.5	251.7	253.1	237.2	241.0	244.7	243.5	237.9	223.5	242.1

## Non-durable Manufactures

1935 .....	79.8	82.3	82.8	84.1	89.4	92.3	90.3	92.1	96.4	95.2	93.8	89.3	89.0
1936 .....	86.1	89.1	90.2	92.9	97.2	99.0	99.0	101.1	105.0	104.4	103.4	97.4	97.1
1937 .....	95.6	99.4	101.5	104.4	108.7	111.6	109.6	110.0	116.9	112.6	109.2	101.0	106.7
1938 .....	93.2	94.3	94.7	95.8	98.6	99.7	99.0	103.8	106.8	104.5	102.2	94.7	98.9
1939 .....	93.8	97.0	98.8	101.0	105.4	108.3	107.9	113.5	117.9	121.1	120.2	114.0	108.2
1940 .....	112.0	115.5	115.9	117.7	122.7	125.6	125.8	129.5	135.4	134.2	133.3	127.3	124.6
1941 .....	125.3	130.5	132.4	138.4	143.5	150.1	151.9	158.8	164.7	164.7	166.4	157.8	148.7
1942 .....	160.9	165.0	165.4	167.5	169.0	169.1	170.4	173.5	173.6	173.8	176.1	167.9	169.4
1943 .....	163.1	167.2	167.4	168.6	170.3	171.9	171.7	174.8	175.7	176.5	178.4	171.9	171.5
1944 .....	172.1	174.7	174.7	176.4	177.0	180.6	179.9	185.7	184.6	185.9	187.8	178.3	179.8
1945 .....	177.3	179.9	181.7	180.8	177.5	177.0	172.1	172.8	176.4	177.3	177.0	165.9	176.3
1946 .....	169.3	171.7	174.5	177.1	179.5	183.7	175.4	182.6	185.8	187.8	193.4	181.4	180.2
1947 .....	181.0	183.5	184.2	190.7	191.6	196.1	190.8	196.0	197.4	196.5	201.6	185.5	191.2
1948 <sup>P</sup> .....	186.5	192.9	192.2	193.1	196.1	200.1	193.6	199.9	206.4	208.7	205.6	190.0	197.1
1949 <sup>P</sup> .....	185.8	189.4	188.8	197.3	199.7	204.0	194.0	203.2	209.2	208.6	205.7	193.1	198.2
1950 <sup>P</sup> .....	187.9	196.2	196.9	207.5	205.0	214.7	205.5	207.9	221.6	224.5	222.3	209.7	208.3
1951 <sup>P</sup> .....	200.7	210.9	217.7	219.0	221.2	222.2	210.6	218.1	218.6	219.4	211.4	197.9	214.0

## Foods and Beverages

1935 .....	69.9	71.4	71.0	77.0	87.4	94.3	94.0	93.5	101.8	98.4	94.3	85.1	86.6
1936 .....	75.5	77.9	78.6	84.1	97.4	102.3	104.9	106.4	115.4	113.2	108.8	96.4	96.7
1937 .....	84.6	85.3	86.2	91.5	102.4	108.1	110.2	114.8	126.2	118.1	113.3	98.9	103.3
1938 .....	85.8	85.7	86.6	91.7	104.5	110.7	111.5	119.0	123.4	117.5	111.0	95.0	103.5
1939 .....	87.7	88.5	89.5	96.8	107.0	113.7	114.8	123.3	131.0	129.5	123.4	112.6	109.8
1940 .....	102.2	102.4	102.9	107.9	119.2	127.9	129.3	129.7	144.2	138.8	136.5	121.8	121.9
1941 .....	111.7	116.5	116.6	127.1	137.7	152.3	152.7	161.5	168.2	160.1	157.8	140.4	141.9
1942 .....	134.6	135.3	133.4	141.6	148.5	154.6	158.5	165.5	165.4	161.0	163.3	149.1	150.9
1943 .....	135.5	139.2	138.9	146.0	153.9	162.3	163.9	169.1	171.1	171.1	173.3	163.4	157.3
1944 .....	160.8	162.2	161.4	167.2	172.2	181.3	183.1	188.8	188.1	182.4	185.6	170.8	175.3
1945 .....	162.7	161.5	164.7	169.2	173.1	180.3	183.0	188.9	197.1	190.8	187.9	171.3	177.7
1946 .....	168.1	165.8	170.1	174.2	182.7	196.8	201.5	210.7	215.9	208.9	201.8	180.4	189.7
1947 .....	171.4	165.1	163.4	184.5	192.2	208.6	215.8	221.8	218.3	209.4	217.8	188.3	196.4
1948 <sup>P</sup> .....	181.0	179.5	177.8	182.3	194.1	210.7	218.9	230.0	232.6	224.6	212.4	182.6	202.2
1949 <sup>P</sup> .....	165.0	162.4	169.6	184.6	202.4	218.4	223.3	237.5	234.6	227.2	221.1	193.9	203.3
1950 <sup>P</sup> .....	168.2	171.1	176.2	194.2	207.0	225.2	223.7	228.4	228.2	230.0	220.8	190.3	205.3
1951 <sup>P</sup> .....	171.9	175.2	189.8	198.4	215.1	229.1	235.2	248.7	240.0	234.2	217.5	195.3	212.5



**Foods**  
(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935.....	70.0	70.8	71.0	77.6	90.3	97.3	97.2	96.8	107.5	103.4	97.6	85.1	88.3
1936.....	73.1	74.3	76.3	83.2	98.8	104.8	106.0	109.4	121.2	118.7	111.3	95.8	97.7
1937.....	79.7	80.5	82.4	88.3	100.0	106.2	108.1	114.0	130.8	129.2	113.5	98.2	101.9
1938.....	81.8	81.1	83.3	88.2	103.8	110.7	116.1	121.2	127.4	118.5	111.5	92.0	102.5
1939.....	84.4	84.2	86.5	93.2	106.6	113.8	118.6	125.0	133.8	132.6	126.4	112.0	109.4
1940.....	99.7	98.7	99.0	103.6	117.1	124.9	126.1	126.8	143.7	137.9	136.5	118.5	119.4
1941.....	107.2	111.4	111.6	121.8	134.8	149.5	149.9	160.5	169.1	160.1	156.3	136.8	139.1
1942.....	128.6	126.6	125.9	132.7	140.6	147.0	151.2	166.3	166.2	155.4	155.2	144.0	144.3
1943.....	130.0	134.6	137.4	144.6	155.3	163.5	163.7	167.5	169.6	170.2	173.4	162.1	156.0
1944.....	156.8	158.1	158.9	161.5	169.8	177.0	176.8	184.4	184.4	177.4	182.9	164.9	171.1
1945.....	160.4	156.8	156.5	161.0	164.1	173.3	177.1	180.9	190.4	180.2	180.1	158.6	170.0
1946.....	158.4	152.8	155.3	159.6	167.0	182.1	187.0	199.1	206.1	198.9	193.0	167.7	177.2
1947.....	159.9	150.3	145.3	170.8	178.6	193.3	200.4	203.0	203.3	194.7	205.5	173.4	181.5
1948 <sup>P</sup> .....	165.1	162.0	161.4	160.7	173.7	187.8	196.0	207.6	216.2	208.1	193.8	163.3	183.0
1949 <sup>P</sup> .....	146.8	146.5	149.2	159.5	174.9	188.9	191.2	208.8	213.7	211.1	202.0	170.7	186.3
1950 <sup>P</sup> .....	149.6	153.0	157.3	166.1	183.3	193.8	195.4	209.5	211.1	212.9	200.2	170.7	183.6
1951 <sup>P</sup> .....	158.7	155.3	157.5	166.7	189.1	200.9	205.2	226.2	220.2	217.8	198.3	173.5	188.7

**Meat Products**

1935.....	82.3	80.9	75.9	84.7	79.4	70.6	66.9	68.7	77.0	98.8	94.8	81.2	86.1
1936.....	85.3	82.3	84.2	91.9	89.6	89.9	79.8	86.5	103.4	130.3	135.2	111.3	97.5
1937.....	96.5	94.9	98.4	99.7	92.2	88.6	78.2	83.7	100.1	121.9	129.6	103.5	98.9
1938.....	105.9	98.9	101.3	104.1	101.9	89.4	81.9	88.6	109.2	128.6	131.4	100.2	108.5
1939.....	104.8	100.5	112.1	112.4	115.9	101.0	97.9	110.7	119.9	168.7	168.3	129.3	119.9
1940.....	116.8	117.7	119.0	127.0	127.6	104.3	103.1	112.4	140.4	178.9	196.0	170.2	134.5
1941.....	153.0	144.5	140.4	160.4	141.8	132.7	122.9	130.2	154.4	206.7	222.1	185.7	157.9
1942.....	194.4	181.2	188.4	192.1	182.7	167.8	153.1	138.9	146.3	203.3	250.3	220.6	184.9
1943.....	166.2	189.7	187.9	212.3	208.1	191.6	169.2	170.8	184.5	226.4	292.9	260.7	206.7
1944.....	262.0	268.7	253.8	247.0	233.5	195.4	168.5	162.0	166.2	211.1	274.9	251.5	224.6
1945.....	261.1	235.3	222.6	217.6	189.6	168.4	159.2	172.4	208.5	257.0	289.7	217.2	177.2
1946.....	226.2	196.3	199.9	189.7	158.8	163.3	157.7	178.6	179.8	243.0	273.4	191.5	196.4
1947.....	170.2	148.3	152.7	189.9	169.9	155.7	155.6	154.2	102.8	147.3	324.5	242.4	176.1
1948 <sup>P</sup> .....	228.2	197.4	199.9	181.5	178.4	158.7	156.1	144.2	170.0	200.4	226.7	166.2	182.6
1949 <sup>P</sup> .....	157.7	141.3	156.0	167.3	154.5	146.6	143.6	147.9	173.3	219.1	250.3	200.8	171.5
1950 <sup>P</sup> .....	168.2	162.9	171.0	181.6	172.8	156.7	143.7	144.4	166.3	183.3	270.5	150.5	168.8
1951 <sup>P</sup> .....	164.4	153.7	150.1	167.9	171.3	167.0	146.1	149.7	156.9	189.3	292.0	152.6	164.3

**Cattle Slaughtered**

1935.....	91.3	81.2	79.2	84.0	87.0	76.9	76.5	90.7	105.8	124.9	124.3	87.2	92.4
1936.....	92.5	88.6	84.6	94.6	88.3	90.6	89.0	103.3	121.1	144.6	145.3	101.5	103.6
1937.....	95.2	83.8	90.7	89.6	81.7	88.2	86.0	107.8	137.7	153.0	135.3	85.9	103.0
1938.....	96.6	86.5	91.9	91.0	99.1	89.0	91.2	96.4	113.8	123.1	131.4	87.3	99.6
1939.....	97.2	82.5	89.6	86.6	97.2	92.3	89.7	99.5	117.0	136.8	135.6	90.8	101.2
1940.....	97.3	86.5	92.0	99.0	95.1	88.2	87.1	100.1	112.4	123.2	137.0	98.4	102.1
1941.....	103.4	89.6	87.6	97.3	102.4	104.0	110.6	121.6	136.0	156.1	158.7	115.7	115.4
1942.....	126.9	110.7	108.3	98.0	96.3	105.0	110.9	103.8	79.0	147.1	186.8	131.0	118.9
1943.....	78.6	111.9	110.6	127.9	123.9	116.6	112.2	135.4	151.4	145.9	167.2	137.6	126.7
1944.....	136.9	147.1	147.5	152.0	146.8	133.2	141.5	167.6	168.5	178.7	215.4	203.2	162.0
1945.....	211.0	188.2	171.3	161.3	140.3	131.1	142.2	180.9	247.8	275.3	366.4	279.2	198.6
1946.....	201.4	173.3	160.2	125.0	106.6	150.6	162.0	208.7	206.1	247.5	267.5	173.3	183.1
1947.....	140.0	124.6	111.9	134.3	118.3	115.2	140.0	168.7	59.7	114.3	281.2	192.0	141.8
1948.....	173.1	148.8	146.7	140.6	132.7	125.0	125.1	123.1	207.2	209.4	227.4	148.9	168.8
1949.....	147.1	132.3	136.6	138.2	135.6	134.9	163.1	122.7	187.7	182.4	211.2	141.2	154.8
1950.....	156.5	133.5	128.0	130.3	128.9	124.8	147.0	132.1	147.0	148.1	176.4	124.0	138.5
1951.....	133.4	116.0	108.0	133.9	144.0	155.1	134.1	138.5	153.9	140.1	136.6	94.1	141.0

## Calves Slaughtered

(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	48.7	58.3	88.6	135.2	132.6	121.9	100.1	83.3	87.5	87.0	73.0	48.8	88.8
1936 .....	49.2	57.4	92.6	134.6	138.0	133.2	106.3	101.8	107.3	95.4	79.9	63.3	96.6
1937 .....	55.9	68.1	108.1	160.0	172.7	162.0	130.8	133.1	127.4	104.8	86.4	52.3	113.5
1938 .....	55.0	66.1	105.1	148.3	167.9	134.8	106.9	101.4	91.1	88.5	77.3	49.8	99.4
1939 .....	56.9	61.8	106.6	150.8	175.8	133.5	112.4	99.2	93.0	96.7	79.5	56.1	101.9
1940 .....	52.6	64.1	96.5	174.4	166.2	141.0	128.1	99.2	100.2	100.8	93.3	58.4	106.2
1941 .....	52.4	61.6	102.4	174.4	154.4	153.8	127.8	108.6	118.3	118.8	91.1	64.2	110.7
1942 .....	56.6	62.4	120.3	165.3	157.1	142.9	115.4	94.5	97.1	94.7	84.7	54.1	103.8
1943 .....	38.8	55.8	109.2	159.9	167.7	138.9	107.7	105.5	96.5	90.2	103.4	61.0	102.9
1944 .....	50.8	55.9	100.4	167.4	162.4	134.4	116.4	108.5	117.5	115.3	103.6	68.8	108.5
1945 .....	68.3	72.6	109.0	168.7	150.2	144.3	145.7	134.7	151.2	143.1	149.8	78.9	126.4
1946 .....	61.0	66.6	103.4	167.4	133.2	125.4	136.0	145.7	125.0	160.1	141.4	67.9	119.4
1947 .....	46.5	47.9	80.9	153.7	143.7	125.2	130.5	117.9	56.0	72.5	166.4	89.1	102.5
1948 .....	54.5	55.4	92.0	141.9	162.1	143.1	135.8	146.6	154.7	162.9	143.9	76.4	122.4
1949 .....	55.6	51.4	91.1	142.6	143.0	136.7	138.9	142.9	172.2	167.2	152.6	79.7	122.8
1950 .....	67.9	69.4	108.5	159.3	158.3	149.2	136.7	115.2	133.6	129.2	128.6	64.0	118.3
1951 .....	59.1	56.9	72.7	129.3	135.9	122.8	103.2	99.6	96.6	110.3	89.4	41.9	93.1

## Sheep and Lambs Slaughtered

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	57.2	59.3	58.7	66.3	53.5	82.8	104.4	138.1	161.1	242.4	160.0	79.5	105.3
1936 .....	69.3	67.1	63.3	50.0	38.8	77.1	96.2	120.4	159.3	239.7	167.5	74.9	102.0
1937 .....	69.7	61.1	68.0	49.0	33.7	63.7	93.9	123.4	170.0	197.1	174.6	85.7	99.2
1938 .....	86.0	71.1	49.9	37.5	39.3	70.2	92.0	118.0	165.9	225.6	147.0	68.7	97.6
1939 .....	62.0	59.1	55.3	48.9	42.7	69.2	90.8	124.8	152.7	234.2	140.6	68.6	95.7
1940 .....	67.0	55.2	55.7	42.3	33.4	55.0	84.7	112.4	137.4	216.4	174.9	77.6	92.7
1941 .....	70.4	59.1	54.4	57.1	49.9	63.0	94.0	129.2	161.6	248.7	174.1	83.3	103.7
1942 .....	73.0	62.7	60.8	57.0	29.5	49.9	80.6	100.4	165.1	242.4	205.7	81.6	100.7
1943 .....	64.7	69.3	69.5	64.5	42.0	50.1	76.7	114.5	125.3	231.0	248.9	134.0	107.5
1944 .....	105.3	89.8	111.2	83.7	53.0	51.9	72.0	144.3	177.3	209.9	209.5	124.7	119.4
1945 .....	104.0	92.3	66.6	39.9	30.2	72.3	101.6	189.1	250.7	364.2	317.4	133.9	146.0
1946 .....	131.2	103.5	116.9	74.4	36.8	66.4	122.1	265.9	241.1	345.1	240.3	120.2	155.3
1947 .....	108.5	104.1	90.3	59.6	26.0	36.3	79.1	165.0	74.6	121.0	366.8	165.6	116.4
1948 .....	91.7	78.0	70.4	35.6	21.9	34.8	63.3	137.0	177.6	203.6	154.4	65.4	94.5
1949 .....	48.8	40.4	41.2	19.7	16.3	32.8	61.0	117.4	185.1	198.7	140.0	53.4	79.6
1950 .....	44.7	34.3	20.7	15.8	14.2	25.6	47.0	77.4	142.2	158.2	144.4	49.1	64.5
1951 .....	43.0	29.2	27.9	24.1	12.8	16.7	28.6	68.5	113.5	141.7	135.8	41.2	56.9

## Hogs Slaughtered

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	96.9	98.8	87.1	95.6	85.1	73.1	66.3	60.7	65.8	90.3	91.2	95.3	83.9
1936 .....	93.1	89.1	91.4	96.4	96.8	93.0	77.1	80.0	97.9	130.0	147.0	136.6	102.4
1937 .....	119.3	122.9	121.3	120.8	111.1	99.4	79.8	73.3	81.9	111.7	135.8	127.0	108.7
1938 .....	117.5	109.1	105.9	105.8	93.4	77.6	64.1	69.6	89.8	110.1	116.1	99.5	96.5
1939 .....	96.0	96.7	104.8	101.8	97.9	79.6	78.1	92.1	96.0	150.7	166.8	141.6	108.5
1940 .....	126.4	135.6	133.0	137.2	143.9	110.6	108.3	118.0	157.6	207.1	238.5	227.8	153.7
1941 .....	194.7	188.3	178.6	200.1	168.0	150.6	130.3	135.8	165.8	237.3	272.8	244.1	188.9
1942 .....	210.0	199.3	205.7	212.7	201.2	175.0	150.2	133.7	154.0	195.4	254.0	250.9	195.2
1943 .....	198.1	213.1	206.1	229.1	226.6	208.5	179.4	168.9	183.9	248.8	343.4	358.8	230.4
1944 .....	362.4	373.3	344.7	329.6	315.6	261.2	202.6	166.4	164.9	228.6	310.5	279.3	278.3
1945 .....	263.2	231.8	215.6	205.3	175.0	143.5	121.5	112.2	118.5	164.3	194.5	168.6	176.2
1946 .....	166.9	145.0	152.5	155.7	135.6	111.4	92.4	82.5	87.9	137.5	167.1	141.5	131.3
1947 .....	137.5	117.4	128.8	162.3	148.7	132.4	114.0	96.0	77.8	120.0	250.6	200.9	140.5
1948 .....	201.3	173.8	175.2	150.9	150.2	128.1	96.0	83.9	88.2	123.6	153.5	133.8	138.2
1949 .....	122.6	109.7	123.2	134.1	118.6	107.2	90.0	90.5	101.6	156.8	195.5	182.3	127.7
1950 .....	129.1	136.9	152.5	163.5	153.3	129.1	102.6	96.0	111.8	145.3	164.6	142.0	135.6
1951 .....	140.6	133.7	134.8	139.4	143.2	126.0	109.7	110.3	110.7	161.7	193.5	161.2	138.7



## Dairy Products

(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	37.9	42.1	50.4	72.7	99.7	154.7	150.2	137.8	112.9	87.2	55.4	44.9	87.2
1936 .....	43.0	45.3	53.5	76.7	113.5	162.6	160.4	147.1	118.6	96.3	61.7	48.8	94.0
1937 .....	47.8	50.5	59.4	83.1	122.5	176.2	173.1	161.5	129.3	104.5	63.7	50.5	101.8
1938 .....	49.9	53.4	63.0	93.9	138.5	186.6	183.9	161.4	129.8	107.2	69.7	54.8	107.7
1939 .....	51.3	53.1	62.3	95.4	130.3	187.5	186.7	163.0	132.8	112.3	74.6	63.5	109.4
1940 .....	60.8	65.0	78.6	107.2	147.1	215.7	207.8	187.7	145.8	115.6	79.4	69.9	123.4
1941 .....	75.3	82.8	95.1	139.3	191.0	249.8	242.3	231.0	175.1	138.5	99.1	81.9	150.1
1942 .....	77.0	85.5	103.7	151.4	208.9	260.9	258.3	249.2	190.6	155.7	112.1	93.0	162.2
1943 .....	90.6	96.1	118.5	171.3	221.1	295.7	301.6	266.4	203.1	168.4	112.5	90.6	178.0
1944 .....	98.4	97.8	117.1	185.5	246.2	308.7	307.8	267.1	208.9	179.5	125.6	98.6	186.8
1945 .....	96.2	98.4	121.5	185.3	225.4	298.1	303.2	261.0	203.7	155.1	109.1	87.6	178.7
1946 .....	81.5	83.4	103.1	168.1	208.8	286.5	274.4	236.8	182.3	147.5	100.6	83.3	163.0
1947 .....	94.7	91.3	112.6	202.9	246.5	341.7	353.8	326.4	257.6	201.9	134.1	103.7	205.6
1948 <sup>P</sup> .....	101.6	108.9	138.5	185.9	269.5	365.2	371.9	342.4	270.6	193.5	147.0	120.7	218.0
1949 <sup>P</sup> .....	115.8	121.8	150.6	214.7	286.9	356.3	338.6	314.9	240.0	204.0	152.6	116.6	217.7
1950 <sup>P</sup> .....	105.6	117.4	143.8	200.6	259.4	341.8	327.3	307.2	243.7	194.4	145.9	123.1	209.2
1951 <sup>P</sup> .....	117.5	124.6	152.8	202.5	284.2	365.4	361.7	317.4	260.5	202.6	146.9	130.2	222.2

## Creamery Butter

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	36.9	37.2	43.2	67.3	107.4	181.7	169.0	151.0	130.0	97.0	61.4	49.2	94.3
1936 .....	43.1	39.7	45.2	71.6	120.6	186.8	170.5	149.4	136.0	104.8	67.0	49.3	98.7
1937 .....	42.4	39.1	45.9	72.4	117.5	181.5	164.2	150.2	138.1	105.1	63.0	44.9	97.0
1938 .....	39.6	39.0	46.3	80.9	137.3	198.0	183.9	160.7	143.6	111.2	69.5	51.3	105.1
1939 .....	46.3	43.3	49.7	81.3	126.5	195.2	179.6	154.8	141.7	112.2	72.7	56.2	105.0
1940 .....	47.8	45.2	52.0	79.3	125.1	199.0	181.5	154.8	131.4	103.5	71.6	58.5	104.1
1941 .....	53.5	51.1	58.8	94.1	151.2	199.5	178.2	168.0	153.0	113.6	73.6	55.1	112.5
1942 .....	48.9	47.9	55.6	83.2	139.3	196.3	183.9	171.6	149.5	114.5	83.5	67.0	111.8
1943 .....	62.1	60.9	70.8	112.9	152.1	219.9	202.6	183.9	156.8	118.4	74.6	56.4	122.6
1944 .....	51.5	54.0	64.6	102.9	155.6	216.2	196.5	168.7	146.7	115.5	78.2	58.6	117.4
1945 .....	52.1	54.1	69.5	103.3	147.1	208.9	201.2	173.4	148.4	109.1	67.6	49.7	115.4
1946 .....	43.9	44.5	55.9	96.8	145.2	208.0	187.2	156.2	127.4	100.9	65.5	49.1	106.7
1947 .....	46.3	44.4	57.8	101.1	143.0	211.5	192.9	172.2	158.2	122.9	73.8	46.6	114.2
1948 .....	40.9	41.5	54.0	86.9	145.7	211.3	193.1	173.0	146.2	113.8	78.0	54.6	111.6
1949 .....	45.9	43.2	54.7	97.5	151.8	195.3	182.2	156.4	152.4	117.6	75.3	53.4	110.5
1950 .....	46.6	43.4	56.5	99.0	130.0	189.1	171.8	153.6	132.5	102.3	62.6	44.9	102.7
1951 .....	36.9	36.4	47.8	83.0	129.8	189.5	172.7	156.9	142.6	107.4	65.4	48.0	101.4

## Factory Cheese

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	5.9	6.4	7.7	14.0	74.3	180.7	188.0	181.8	177.1	132.7	49.9	14.5	86.1
1936 .....	10.6	9.4	12.6	24.2	98.7	220.7	220.3	202.8	196.0	153.2	59.6	18.0	102.2
1937 .....	10.4	8.9	12.2	25.3	121.2	261.5	252.0	232.6	209.1	152.9	46.3	11.3	112.0
1938 .....	7.2	6.3	7.3	18.9	121.8	234.6	224.6	202.3	195.2	161.1	76.3	21.1	106.4
1939 .....	15.2	13.6	17.1	34.7	113.6	238.3	237.0	208.3	188.4	135.5	54.0	26.6	106.9
1940 .....	18.1	19.8	30.2	51.3	126.1	260.1	251.6	244.1	225.8	160.0	61.4	18.7	122.3
1941 .....	11.0	10.8	14.4	42.2	168.2	279.9	254.2	248.1	209.9	152.1	82.3	61.1	127.9
1942 .....	50.6	44.9	65.0	136.9	260.5	344.6	306.8	298.7	267.1	208.4	104.6	38.0	177.2
1943 .....	22.1	17.8	27.8	63.4	155.3	283.0	272.8	270.7	245.9	194.3	94.9	47.5	141.3
1944 .....	27.0	20.6	31.9	92.1	204.9	327.0	297.4	260.7	243.3	206.0	98.1	44.8	154.5
1945 .....	25.5	22.9	40.4	109.7	221.8	336.4	315.5	284.8	262.2	176.4	73.9	30.3	158.3
1946 .....	18.4	14.5	26.0	73.6	157.9	302.4	254.7	211.8	184.6	129.7	57.2	25.4	121.4
1947 .....	17.4	15.2	25.8	65.5	133.2	244.1	219.0	195.1	159.8	104.3	40.4	12.7	102.7
1948 .....	9.6	10.1	19.2	34.3	99.8	187.4	170.8	147.6	108.1	67.2	25.8	11.6	74.3
1949 .....	7.5	6.1	13.6	56.9	148.9	213.6	191.8	160.4	155.7	128.1	64.6	26.5	97.8
1950 .....	17.0	11.5	21.0	54.3	108.1	188.4	163.7	138.1	123.2	82.0	42.5	31.7	81.8
1951 .....	19.8	13.4	16.7	39.5	87.1	146.9	143.0	130.2	123.5	86.2	38.1	21.3	72.1



**Ice Cream**  
(1935-39=100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935.....	36.4	48.7	55.6	83.6	96.9	130.1	147.4	134.1	72.1	57.3	37.4	38.0	78.1
1936.....	45.9	58.7	69.9	105.1	126.4	157.3	185.1	175.0	87.3	72.0	48.9	46.0	98.1
1937.....	53.4	68.7	78.4	113.4	142.0	176.7	208.0	196.4	98.0	83.9	52.7	51.6	110.3
1938.....	51.4	66.1	72.9	113.4	138.6	170.0	207.7	182.1	94.3	80.7	50.7	49.7	106.3
1939.....	51.9	66.7	73.3	119.3	132.7	171.4	209.6	183.6	95.1	81.4	51.3	52.0	107.4
1940.....	61.3	78.6	97.3	135.1	162.9	219.0	247.6	225.4	121.6	96.3	62.9	63.7	131.0
1941.....	78.6	104.1	120.0	179.6	208.3	279.9	316.6	299.6	149.9	123.7	84.0	78.6	168.6
1942.....	84.7	108.7	129.0	192.9	232.9	291.3	339.6	322.7	162.0	133.3	90.3	84.0	180.9
1943.....	86.6	110.1	141.3	206.4	260.1	338.3	421.3	336.0	181.3	166.4	113.1	93.9	204.6
1944.....	119.7	116.1	131.6	232.4	285.7	325.1	403.0	342.6	184.7	165.0	120.9	90.1	209.7
1945.....	110.3	120.1	124.1	227.6	232.9	317.6	321.4	318.4	171.4	138.3	112.0	80.6	195.4
1946.....	103.0	104.7	107.3	217.7	231.4	303.1	369.9	316.0	180.4	147.4	95.9	75.4	187.7
1947.....	108.7	97.1	102.6	269.9	318.1	427.1	559.7	534.1	339.6	242.4	172.7	148.1	278.3
1948.....	140.9	156.0	202.4	263.0	349.9	473.3	574.3	518.0	374.1	208.7	173.9	154.4	298.9
1949.....	142.3	157.9	206.3	282.1	374.6	511.4	533.1	525.0	268.9	218.6	165.3	137.4	293.6
1950.....	126.7	151.3	172.3	239.0	370.4	454.6	502.1	466.6	281.1	218.7	189.6	163.6	278.0
1951.....	160.0	172.6	217.9	270.0	401.1	471.4	560.7	468.4	319.0	220.6	172.9	171.3	300.5

**Concentrated Milk**

1935.....	39.7	44.7	66.8	97.5	100.3	126.5	98.1	90.6	91.3	70.0	51.2	44.1	76.7
1936.....	41.1	44.6	60.8	81.2	107.5	120.8	103.6	98.5	93.6	83.2	58.2	57.4	79.2
1937.....	58.1	60.2	78.7	100.7	125.1	151.8	131.9	123.8	122.4	109.5	80.1	71.1	101.1
1938.....	76.9	78.2	104.8	143.9	174.3	193.5	158.6	129.4	117.9	102.1	76.9	72.1	119.0
1939.....	62.0	57.6	82.8	127.6	156.8	194.0	171.1	144.4	139.6	142.4	108.1	99.7	123.8
1940.....	84.6	86.0	116.3	150.3	185.6	242.9	200.6	182.0	160.3	128.5	106.5	110.0	146.1
1941.....	108.3	117.6	144.4	208.8	245.7	286.1	247.7	234.8	203.8	164.7	136.6	106.2	183.7
1942.....	96.1	111.2	159.4	228.4	285.1	301.7	257.2	260.9	237.6	197.5	145.3	122.1	200.2
1943.....	112.9	110.6	160.0	234.0	275.5	325.9	276.5	262.1	233.2	188.5	118.6	103.3	200.1
1944.....	109.3	105.0	156.1	254.4	301.2	358.2	300.2	266.5	239.3	214.2	146.5	138.9	215.8
1945.....	132.5	129.5	204.7	284.3	323.6	371.2	318.7	279.2	262.7	186.0	134.2	129.9	229.7
1946.....	102.8	114.8	193.8	277.9	316.4	409.2	316.3	282.7	261.2	208.1	140.0	131.4	229.5
1947.....	125.2	129.6	201.2	273.8	324.1	438.1	361.2	318.0	311.3	264.1	161.2	126.8	252.9
1948.....	112.6	125.3	168.8	289.8	415.5	509.1	457.0	436.9	368.0	305.8	212.4	173.9	297.9
1949.....	152.7	151.6	210.4	323.1	412.5	429.1	354.3	311.5	286.5	268.2	171.7	140.3	267.7
1950.....	131.4	136.5	186.5	292.5	351.7	477.8	401.8	356.2	348.0	250.1	171.8	130.7	269.6
1951.....	137.9	140.7	192.7	312.4	441.2	564.9	492.0	407.3	351.8	273.8	182.6	155.9	304.4

**Canning And Preserving**

1935.....	34.4	33.3	32.4	43.7	97.0	107.9	128.7	113.0	165.5	118.0	77.8	47.8	83.3
1936.....	41.4	39.0	36.7	51.2	108.8	114.0	132.2	140.4	214.8	158.4	104.8	60.1	100.2
1937.....	45.6	44.4	40.4	52.6	99.5	109.1	138.8	159.6	252.0	147.4	100.4	59.6	104.1
1938.....	46.4	43.4	45.3	57.4	103.4	131.6	143.1	209.4	209.3	116.8	82.1	49.0	103.1
1939.....	53.4	50.0	47.9	53.2	98.4	121.5	130.4	186.7	218.3	150.6	117.9	83.0	109.3
1940.....	75.7	69.8	63.8	65.7	109.2	131.4	163.3	170.6	247.5	164.1	121.1	83.5	122.2
1941.....	83.7	85.7	72.4	86.0	133.3	180.5	186.0	252.3	301.1	198.1	139.6	102.9	151.8
1942.....	91.3	88.0	68.8	74.9	108.7	141.6	185.3	239.6	274.1	163.8	123.3	93.8	137.7
1943.....	80.7	73.4	70.7	72.5	110.0	128.4	156.3	187.6	231.3	162.1	139.6	106.6	126.6
1944.....	110.0	96.1	90.2	94.2	130.6	163.3	214.4	287.0	316.2	206.0	167.0	119.4	166.2
1945.....	115.7	112.1	102.4	105.8	144.9	161.3	215.8	253.3	305.5	201.5	159.0	119.3	166.4
1946.....	119.2	107.6	109.3	124.0	172.2	202.1	263.7	339.2	395.9	283.9	190.7	143.8	204.3
1947.....	138.6	115.2	103.2	116.9	155.7	189.3	258.6	285.6	351.4	243.2	179.4	133.5	189.2
1948 <sup>P</sup> .....	133.6	125.3	103.2	103.8	153.2	183.7	254.4	318.0	369.5	312.4	194.0	135.8	198.9
1949 <sup>P</sup> .....	86.6	91.4	72.4	85.7	145.9	181.4	220.0	327.5	348.3	256.6	176.3	128.6	176.7
1950 <sup>P</sup> .....	97.2	98.7	76.6	83.4	152.4	181.3	234.9	307.7	313.7	283.9	204.2	135.4	180.8
1951 <sup>P</sup> .....	114.2	97.3	89.1	101.0	166.1	180.6	251.7	351.3	361.6	301.4	182.0	147.8	195.3

## Grain Mill Products

(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935.....	82.5	86.8	87.3	85.3	90.5	87.9	81.1	89.0	116.2	126.2	120.6	89.6	95.3
1936.....	85.6	93.9	97.7	93.4	97.4	96.2	99.1	109.1	115.0	123.8	117.0	93.7	101.8
1937.....	93.0	94.4	98.4	97.8	88.2	93.5	93.5	96.3	117.9	122.1	119.5	95.1	100.8
1938.....	92.4	91.3	92.8	85.4	88.2	85.0	83.9	94.0	119.9	136.6	120.4	91.1	98.4
1939.....	91.4	92.3	92.3	93.6	87.1	88.7	89.9	100.8	132.6	135.0	127.5	113.0	103.7
1940.....	116.9	120.0	115.0	105.7	105.5	100.4	94.3	104.8	121.5	126.2	118.6	90.7	110.0
1941.....	93.3	111.1	107.0	117.2	129.8	131.0	133.4	133.0	137.8	135.7	143.6	119.0	124.4
1942.....	117.5	119.2	116.5	123.8	105.0	102.3	108.2	119.9	124.8	131.3	149.1	143.3	121.7
1943.....	149.4	159.0	160.8	156.4	152.3	146.2	146.7	150.7	163.2	173.3	179.6	168.3	158.8
1944.....	169.9	175.8	176.7	171.3	156.9	152.9	144.2	158.3	161.8	168.5	164.3	173.6	166.2
1945.....	165.0	165.8	169.8	169.3	157.9	163.2	149.0	157.4	171.1	177.2	161.5	173.0	166.7
1946.....	183.0	191.3	191.1	190.9	189.3	186.6	180.3	184.5	200.1	204.6	210.7	197.7	192.5
1947.....	198.6	190.8	199.2	200.8	201.3	207.8	186.6	196.0	197.9	195.7	189.5	155.0	193.3
1948 <sup>P</sup> .....	160.3	169.3	166.4	168.2	158.1	160.6	151.9	158.6	174.9	167.0	173.5	149.2	163.2
1949 <sup>P</sup> .....	143.3	148.6	156.1	166.0	162.0	166.7	152.6	169.4	179.0	177.5	176.7	147.3	162.1
1950 <sup>P</sup> .....	142.0	153.5	166.2	166.9	160.6	152.1	137.7	158.1	169.9	174.2	176.6	158.8	159.7
1951 <sup>P</sup> .....	160.0	164.4	179.5	181.9	186.1	186.0	168.7	184.1	188.9	191.4	192.7	171.1	179.6

## Wheat Flour

1935.....	80.8	83.5	85.6	82.2	91.8	84.4	78.2	91.6	130.6	143.9	131.3	78.3	96.9
1936.....	77.7	87.1	96.2	86.3	98.2	94.3	102.9	111.9	124.5	134.5	124.6	86.3	102.0
1937.....	82.6	82.6	89.6	86.1	73.6	81.9	85.7	85.4	117.7	121.8	118.6	79.7	92.1
1938.....	75.4	75.3	78.8	67.6	80.0	79.3	76.0	87.0	134.1	156.0	131.4	82.9	93.7
1939.....	89.6	91.7	93.8	98.4	93.6	96.9	90.2	108.5	157.2	170.5	160.0	130.5	115.1
1940.....	100.1	106.5	107.4	110.3	101.5	100.0	96.7	102.1	139.8	148.0	130.4	88.3	110.9
1941.....	92.8	129.6	120.9	141.3	167.3	180.2	166.9	151.6	134.9	125.9	141.7	124.2	139.8
1942.....	122.7	140.5	147.9	166.8	121.2	109.2	125.4	148.9	142.1	145.9	167.8	162.6	141.8
1943.....	160.6	176.5	172.9	175.0	171.8	151.8	153.4	154.5	164.8	173.3	178.1	171.4	167.0
1944.....	167.0	177.6	178.7	172.7	154.7	153.0	142.6	158.9	161.5	167.7	188.8	166.1	165.8
1945.....	163.1	167.8	176.8	180.9	166.2	174.6	149.1	159.3	174.1	175.6	187.0	177.5	171.0
1946.....	177.1	192.9	196.2	189.0	185.4	191.2	167.3	168.4	191.4	195.1	206.3	193.5	187.8
1947.....	202.3	197.1	199.1	202.0	205.1	207.7	176.8	193.7	205.0	195.5	185.3	129.9	191.6
1948.....	150.2	159.5	153.4	160.2	142.1	156.8	141.3	132.2	179.9	160.1	161.3	136.1	132.8
1949.....	120.2	130.4	132.7	134.6	128.5	136.3	118.1	138.0	152.0	152.1	159.7	128.4	135.9
1950.....	126.4	141.9	145.3	143.9	133.1	134.6	104.3	133.9	152.0	173.8	174.5	159.8	143.6
1951.....	155.6	176.0	179.5	178.2	166.6	171.5	115.0	134.0	152.9	151.8	159.1	143.6	157.0

## Rolled Oats

1935.....	69.8	81.9	55.6	58.6	62.8	82.9	63.8	66.5	125.1	162.4	150.0	59.3	89.9
1936.....	76.0	96.1	90.3	64.9	73.3	89.7	97.1	119.1	116.5	130.7	126.3	107.0	95.6
1937.....	97.5	81.1	56.5	72.3	60.2	63.9	72.3	88.4	117.2	139.2	151.0	112.6	92.5
1938.....	101.8	100.6	83.3	55.2	53.3	62.5	69.1	90.9	133.4	203.7	163.9	88.1	100.5
1939.....	102.4	108.4	98.4	65.4	65.0	76.1	82.9	115.3	209.4	184.7	150.9	131.7	118.2
1940.....	195.0	205.9	138.3	68.4	108.0	102.9	83.4	118.1	112.5	125.9	101.9	50.1	118.4
1941.....	44.4	61.4	50.5	108.2	120.9	63.0	124.4	104.3	222.7	244.7	265.9	164.7	136.2
1942.....	140.2	74.0	57.1	46.3	45.4	50.4	53.5	48.3	88.4	108.6	82.7	73.5	92.5
1943.....	61.0	67.8	68.7	46.6	39.6	52.6	46.3	70.1	88.2	104.0	107.0	84.3	69.9
1944.....	49.1	53.6	54.8	47.6	52.0	59.6	71.7	123.4	142.0	149.6	174.0	155.3	93.8
1945.....	173.6	159.3	167.2	146.8	127.7	124.5	102.2	97.5	120.8	131.4	113.5	79.2	122.8
1946.....	145.8	177.3	159.4	177.2	203.3	163.3	159.3	157.3	179.9	185.6	183.9	152.9	170.4
1947.....	133.9	107.6	131.1	114.9	109.0	121.8	76.6	106.6	111.3	129.1	125.6	95.7	117.3
1948.....	103.1	122.1	84.6	97.4	86.1	56.8	47.6	117.7	138.1	102.3	100.9	87.7	96.0
1949.....	49.6	53.2	69.9	59.1	50.5	72.2	36.6	80.4	130.3	136.6	83.7	65.0	74.0
1950.....	42.7	54.8	71.2	97.8	64.6	47.4	22.7	62.7	109.8	111.8	99.5	52.3	68.8
1951.....	73.1	62.7	48.8	27.7	48.1	58.5	50.4	93.7	114.7	103.8	93.7	78.7	71.1



**Millfeed**  
(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May •	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	78.2	78.5	82.8	75.4	86.2	80.7	76.5	88.6	127.9	145.3	130.7	80.3	94.3
1936 .....	73.9	88.1	97.1	88.6	97.6	102.7	108.8	115.9	130.5	137.1	128.8	83.4	104.4
1937 .....	83.2	88.2	91.4	84.4	74.5	85.8	86.8	85.6	112.9	113.9	110.0	74.5	90.9
1938 .....	70.3	70.3	75.1	65.2	77.3	80.1	73.1	83.3	127.4	151.6	126.3	82.5	90.2
1939 .....	84.8	92.4	95.6	105.3	99.1	103.4	104.7	117.4	173.8	175.2	160.7	130.3	120.2
1940 .....	97.8	105.0	104.7	108.9	104.2	101.3	101.5	104.9	144.2	147.6	127.3	86.4	111.1
1941 .....	89.7	123.7	112.8	128.0	155.9	169.1	155.1	144.0	141.1	129.3	139.8	126.0	134.5
1942 .....	117.6	123.5	138.6	152.5	112.1	107.0	123.1	142.0	134.2	136.1	158.1	151.2	133.0
1943 .....	146.8	163.3	159.9	163.0	154.3	141.4	144.6	141.6	152.1	158.4	163.7	152.3	153.4
1944 .....	155.1	157.5	159.1	155.7	140.0	139.5	129.6	146.9	147.7	158.1	166.4	154.6	150.8
1945 .....	150.3	152.5	167.0	160.6	147.7	157.8	134.1	148.5	160.9	164.1	173.7	163.9	156.8
1946 .....	161.5	174.4	179.5	171.2	170.4	172.3	157.3	157.7	182.0	182.2	194.0	182.3	173.7
1947 .....	188.5	180.5	179.8	190.4	195.1	198.8	169.9	193.2	197.2	193.2	179.5	130.2	183.0
1948 .....	148.2	155.7	152.0	162.0	143.3	158.6	148.6	129.6	171.1	156.9	152.1	127.6	150.5
1949 .....	112.3	120.1	123.0	126.4	119.1	126.7	111.1	131.4	145.0	144.5	149.8	120.7	127.5
1950 .....	119.6	132.0	137.7	137.5	125.3	126.1	98.1	127.3	144.7	167.9	166.2	160.2	136.9
1951 .....	159.3	178.4	178.5	178.5	168.6	174.6	121.5	135.0	156.8	157.4	163.1	145.3	159.7

**Ground Feed**

1935 .....	101.6	108.6	102.3	101.6	80.2	64.3	53.9	66.2	93.4	112.2	132.8	133.5	95.9
1936 .....	121.8	124.3	118.2	117.4	76.2	70.2	69.4	82.5	100.8	117.6	132.2	122.7	104.4
1937 .....	106.9	102.6	101.8	90.7	69.4	57.2	50.0	67.3	98.0	121.2	134.5	124.2	93.6
1938 .....	113.8	105.7	99.8	97.6	71.2	56.0	55.9	71.7	95.1	124.8	145.7	131.2	97.4
1939 .....	111.5	113.1	114.3	114.4	82.6	73.8	70.4	81.0	110.6	133.7	153.6	144.6	108.6
1940 .....	133.5	130.5	136.1	113.5	101.1	87.8	81.2	98.6	122.3	139.0	159.9	149.0	121.0
1941 .....	158.5	155.8	166.3	135.4	108.7	95.2	93.1	113.6	141.0	150.7	168.6	153.3	136.7
1942 .....	147.5	146.5	136.9	137.9	113.4	97.2	98.4	123.6	162.4	190.3	225.1	209.5	149.1
1943 .....	190.2	187.8	179.4	184.4	159.8	134.5	136.5	155.7	176.6	198.0	221.0	197.2	176.8
1944 .....	178.0	169.9	166.3	170.9	148.0	126.2	102.0	125.3	149.6	166.2	187.2	177.0	155.5
1945 .....	163.4	157.5	153.5	157.0	130.2	123.2	114.3	131.2	143.2	161.0	171.9	172.5	148.2
1946 .....	159.5	163.2	159.5	166.3	146.0	124.6	120.0	132.3	153.6	164.3	193.1	181.1	155.3
1947 .....	156.8	168.5	155.7	161.7	158.2	153.0	130.0	135.9	140.4	151.8	158.1	132.5	150.2
1948 .....	133.0	134.2	129.1	121.6	113.1	101.0	105.6	107.8	113.6	130.3	148.3	129.6	122.3
1949 .....	121.6	125.5	114.4	122.7	105.0	97.4	86.6	113.4	119.9	120.7	130.3	115.9	114.4
1950 .....	112.4	117.1	117.6	117.5	96.5	86.3	81.7	95.7	116.2	119.0	136.1	127.3	110.3
1951 .....	110.7	112.7	131.6	106.0	103.5	101.6	101.6	101.8	124.9	134.8	139.0	119.8	115.7

**Bread and Bakery Products**

1935 .....	90.1	90.1	90.4	90.9	91.9	92.8	94.0	94.1	93.6	93.3	92.6	92.6	92.2
1936 .....	90.3	90.5	90.9	91.3	93.4	95.0	96.3	96.1	95.7	95.1	94.8	95.1	93.7
1937 .....	96.8	97.6	98.1	98.6	100.3	101.9	103.5	103.5	103.0	102.3	102.1	102.0	100.8
1938 .....	102.7	102.7	103.2	105.8	107.1	108.7	110.1	110.1	109.1	107.9	107.3	106.5	106.8
1939 .....	104.0	103.6	103.7	104.6	106.1	107.3	108.4	109.3	108.2	108.1	107.5	107.5	106.5
1940 .....	108.2	108.1	109.1	109.6	111.5	113.4	114.8	115.3	114.4	113.9	113.4	113.5	112.1
1941 .....	115.1	116.0	116.9	117.6	119.5	121.7	124.7	125.3	124.2	124.6	124.7	125.5	121.3
1942 .....	126.3	127.7	128.6	129.5	131.6	134.3	137.2	138.2	138.0	138.6	139.6	139.7	134.1
1943 .....	140.4	141.7	143.4	144.7	145.3	148.8	151.6	151.3	149.6	149.9	150.0	150.6	147.3
1944 .....	146.2	146.1	147.3	148.0	149.3	152.0	154.1	154.3	153.5	152.9	153.6	153.5	150.9
1945 .....	148.4	150.7	152.0	152.5	153.4	156.4	159.4	160.0	159.6	159.6	161.2	158.8	156.0
1946 .....	160.9	162.9	164.0	167.0	167.7	171.5	172.7	171.8	169.2	168.0	167.9	166.5	167.5
1947 .....	161.5	160.8	160.7	160.1	160.6	162.5	164.7	164.8	163.8	162.7	162.8	161.1	162.1
1948 <sup>P</sup> .....	159.0	156.9	159.6	155.8	153.9	163.0	171.1	172.5	169.6	168.4	166.5	162.1	163.2
1949 <sup>P</sup> .....	156.2	153.3	150.3	150.0	156.1	161.5	166.8	168.3	164.4	161.8	162.2	160.7	159.3
1950 <sup>P</sup> .....	154.2	150.5	152.4	153.5	157.9	163.8	166.1	167.3	167.8	165.6	169.0	174.0	161.8
1951 <sup>P</sup> .....	170.3	163.9	164.4	168.1	172.2	179.1	184.1	186.7	184.5	181.7	180.1	176.4	176.0



## Miscellaneous Foods

(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	73.6	73.7	74.2	80.3	88.2	93.8	92.2	95.0	96.6	98.0	114.0	112.4	91.0
1936 .....	75.7	77.2	79.3	86.4	97.3	98.6	97.5	101.2	104.6	112.2	120.0	122.9	98.2
1937 .....	81.5	82.8	84.7	90.7	103.7	99.2	96.8	106.6	111.4	120.6	131.6	118.7	103.5
1938 .....	79.6	81.7	84.6	84.1	99.5	100.3	97.2	102.2	110.8	114.6	127.7	118.6	98.2
1939 .....	85.2	87.4	87.3	95.2	108.6	108.6	104.2	111.5	115.6	126.9	137.5	136.2	108.7
1940 .....	101.8	97.5	98.4	104.8	114.9	121.1	115.4	110.6	123.1	132.1	156.4	143.7	118.3
1941 .....	108.9	114.4	121.0	118.6	124.5	135.1	138.3	142.5	153.4	159.3	175.9	182.8	147.9
1942 .....	138.3	135.0	133.0	130.7	135.5	131.3	138.2	142.7	133.4	149.5	163.4	148.6	138.7
1943 .....	132.7	132.4	134.7	129.7	135.3	138.9	133.4	140.7	135.5	156.3	160.5	158.4	140.5
1944 .....	145.9	150.2	155.5	145.1	149.3	156.7	148.7	149.3	151.2	164.7	179.7	167.8	135.3
1945 .....	157.3	159.7	156.5	151.4	149.0	154.2	149.8	147.2	148.8	152.6	168.8	160.9	154.7
1946 .....	154.4	149.8	146.2	137.6	142.0	149.9	146.7	152.0	160.6	167.7	190.2	180.9	156.5
1947 .....	165.6	160.8	135.4	166.7	169.5	174.2	170.7	171.5	190.2	211.3	215.5	198.6	177.5
1948 <sup>P</sup> .....	176.3	179.1	176.3	168.3	168.4	173.0	176.2	186.9	196.0	211.5	220.0	196.7	188.7
1949 <sup>P</sup> .....	177.7	179.4	178.3	175.0	179.1	185.1	186.1	190.6	207.2	234.5	244.0	212.6	195.8
1950 <sup>P</sup> .....	182.1	187.8	192.4	193.8	205.0	208.2	203.0	213.9	220.6	247.5	243.4	215.4	209.4
1951 <sup>P</sup> .....	184.3	184.9	180.6	177.1	188.1	192.8	191.2	200.0	207.7	232.2	237.7	211.2	199.0

## Sugar Refineries

1935 .....	35.1	34.0	29.9	63.1	91.3	111.1	106.0	112.0	90.5	87.3	158.8	168.1	90.6
1936 .....	30.2	28.2	29.1	63.0	112.4	120.4	118.8	122.2	102.2	127.6	191.6	197.6	103.6
1937 .....	27.3	28.2	37.6	61.1	109.0	81.9	80.7	115.0	113.4	134.2	197.7	169.6	96.3
1938 .....	24.4	26.5	30.7	35.6	116.9	115.5	105.6	118.7	117.8	118.2	194.0	169.8	97.6
1939 .....	25.0	33.5	29.6	65.7	127.2	126.5	115.4	131.5	96.6	136.6	196.7	256.0	111.7
1940 .....	65.4	42.8	45.0	74.1	112.2	138.8	119.0	78.4	92.1	110.1	215.9	203.4	108.1
1941 .....	47.7	61.2	79.4	67.8	89.9	138.9	137.9	119.4	129.5	141.9	230.0	211.1	120.4
1942 .....	52.7	56.7	51.8	52.0	77.1	58.6	38.0	72.9	65.3	114.5	171.8	148.6	80.0
1943 .....	66.5	55.1	65.2	49.5	69.2	77.2	70.7	90.1	57.3	124.9	127.0	131.5	82.0
1944 .....	76.3	86.0	101.2	59.8	78.8	95.7	81.5	81.2	76.1	103.9	163.3	155.2	97.0
1945 .....	81.8	90.2	88.9	67.2	73.2	91.7	95.7	81.3	78.2	77.7	140.1	144.3	94.7
1946 .....	93.2	86.3	67.5	33.6	59.5	83.1	76.1	87.6	96.4	94.8	172.1	166.8	93.2
1947 .....	66.9	51.6	56.3	69.0	86.7	91.9	81.8	100.3	131.2	162.4	164.6	123.2	93.6
1948 <sup>P</sup> .....	78.3	90.5	90.2	80.7	102.2	115.2	115.9	152.6	155.0	184.3	204.1	131.1	125.0
1949 <sup>P</sup> .....	76.5	100.5	113.2	97.8	108.8	119.9	103.1	102.2	124.9	206.2	230.2	138.5	126.0
1950 <sup>P</sup> .....	58.8	87.6	82.6	76.1	136.0	153.2	125.3	156.9	134.0	233.1	238.9	170.9	137.8
1951 <sup>P</sup> .....	65.9	81.6	86.2	76.1	118.3	127.0	107.5	120.3	111.7	195.8	210.0	130.3	118.4

## Beverages

1935 .....	69.4	73.8	71.1	74.6	77.4	83.4	82.6	81.4	81.4	80.6	32.3	94.0	78.6
1936 .....	84.4	90.7	86.9	87.4	92.5	93.1	101.1	95.6	94.7	93.4	96.7	98.8	88.2
1937 .....	102.3	102.5	100.0	102.9	111.2	115.0	117.8	117.6	109.7	110.7	112.6	114.8	106.6
1938 .....	100.2	102.3	96.7	104.4	107.1	110.8	116.6	110.9	108.9	113.9	109.7	105.4	107.2
1939 .....	99.4	104.0	100.1	109.6	108.3	113.2	118.9	117.0	121.4	118.5	112.6	114.5	111.6
1940 .....	111.3	115.8	116.9	122.6	126.8	138.7	140.7	140.0	146.1	143.2	136.7	133.6	131.9
1941 .....	127.9	134.7	134.5	145.9	148.2	162.0	162.5	165.3	165.2	159.8	161.2	132.6	151.2
1942 .....	156.0	166.2	160.0	173.4	176.8	184.1	184.7	184.1	184.1	181.2	177.8	167.4	174.5
1943 .....	154.8	155.5	143.9	151.1	149.1	157.9	164.6	174.6	171.6	174.5	172.7	169.2	167.9
1944 .....	175.3	176.9	170.5	187.4	180.5	196.6	205.6	204.4	201.4	200.5	195.6	191.8	190.8
1945 .....	171.1	178.3	194.2	198.2	205.5	207.5	203.4	217.7	220.9	228.7	216.7	218.1	211.1
1946 .....	203.0	212.2	223.2	226.5	235.9	246.5	252.1	252.3	259.6	244.8	233.6	227.6	234.4
1947 .....	212.6	218.2	228.1	233.2	240.6	249.4	257.8	264.1	271.9	261.9	261.4	261.4	274.5
1948 <sup>P</sup> .....	237.5	242.0	236.6	259.5	267.1	292.6	300.7	310.0	291.8	284.7	276.5	254.9	276.9
1949 <sup>P</sup> .....	229.7	219.2	242.6	274.2	300.6	324.5	337.8	340.0	308.4	264.5	280.8	270.8	267.7
1950 <sup>P</sup> .....	234.8	235.8	243.8	294.8	291.6	337.4	348.1	365.5	339.4	291.4	264.7	268.8	267.9
1951 <sup>P</sup> .....	218.8	246.6	305.2	311.6	308.2	335.7	344.7	348.7	310.8	292.9	264.4	278.4	252.2

## Tobacco and Tobacco Products

(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	71.3	76.0	68.6	70.7	78.7	87.7	83.2	85.0	85.3	77.9	96.7	87.8	80.7
1936 .....	73.5	87.4	84.4	87.7	90.7	88.6	91.9	90.9	88.6	92.3	104.7	86.1	88.9
1937 .....	92.0	97.1	87.7	96.9	97.8	105.4	104.5	108.4	104.9	100.2	111.3	107.8	101.2
1938 .....	107.3	119.9	106.7	105.3	102.7	108.6	108.4	107.5	105.3	104.5	131.1	123.8	110.9
1939 .....	121.6	127.9	122.1	113.2	108.1	110.2	115.0	117.0	106.8	124.5	120.3	131.3	118.2
1940 .....	136.0	130.7	135.9	131.9	143.6	113.0	112.9	113.1	114.8	126.7	128.3	132.4	126.6
1941 .....	135.7	141.5	145.9	130.6	121.1	129.5	135.0	148.6	154.7	147.4	149.8	150.9	140.9
1942 .....	164.7	181.9	168.1	165.7	149.2	148.2	152.1	163.5	165.5	183.4	219.5	195.1	171.5
1943 .....	182.4	211.3	194.1	189.2	171.1	150.8	155.7	175.9	176.9	192.6	205.1	200.7	183.8
1944 .....	222.6	221.6	209.8	158.4	168.9	183.0	178.1	201.2	209.8	210.2	216.7	226.7	200.6
1945 .....	240.5	262.5	252.9	228.6	207.5	215.7	196.2	205.3	225.2	239.5	263.8	224.6	230.2
1946 .....	249.2	218.9	169.6	173.8	175.5	194.2	180.5	204.8	210.9	218.2	237.9	218.9	204.4
1947 .....	232.6	245.6	228.5	199.1	206.0	199.2	140.5	191.3	218.8	227.8	226.4	227.5	211.9
1948P .....	210.3	223.0	197.4	214.3	213.9	231.3	160.5	209.0	238.6	241.4	239.8	210.4	215.8
1949P .....	213.6	211.5	212.6	233.5	240.4	246.7	163.6	221.4	252.0	237.9	239.9	220.0	224.4
1950P .....	217.6	247.4	243.5	238.3	242.1	257.2	171.2	209.6	237.7	236.5	223.1	205.5	227.5
1951P .....	233.0	252.2	252.6	228.6	234.3	227.3	165.4	152.0	133.7	273.9	230.0	162.9	212.2

## Cigars

1935 .....	58.8	67.9	77.2	88.4	95.5	106.8	101.5	100.4	107.4	113.7	122.6	92.2	94.4
1936 .....	43.9	72.6	81.5	84.1	96.2	104.0	98.7	99.3	115.6	124.2	121.7	86.1	94.0
1937 .....	53.2	73.7	92.3	94.9	97.5	112.4	98.8	103.8	109.9	124.3	140.7	116.2	101.5
1938 .....	80.4	97.1	99.0	103.8	105.6	114.0	93.5	106.5	102.3	110.5	134.7	100.2	104.0
1939 .....	69.3	80.1	83.8	87.0	103.8	108.5	103.5	103.8	115.1	126.9	161.3	131.6	106.2
1940 .....	86.9	107.3	101.6	125.3	141.6	131.5	115.5	131.8	135.3	151.9	166.4	160.0	129.6
1941 .....	121.7	136.3	127.9	161.2	156.1	155.7	145.0	146.4	162.2	172.1	196.7	169.7	154.3
1942 .....	136.0	156.3	167.0	160.8	155.6	165.5	146.1	155.5	165.7	184.1	178.3	171.0	161.8
1943 .....	146.9	173.3	164.3	166.9	165.7	158.1	142.0	136.4	157.8	159.1	163.2	152.5	157.2
1944 .....	143.2	164.6	164.9	162.9	159.6	152.5	125.2	136.8	157.4	169.7	176.4	153.3	155.5
1945 .....	155.1	180.3	177.4	176.4	158.7	164.0	139.1	138.0	164.4	174.8	172.7	160.2	163.4
1946 .....	159.6	189.5	195.5	185.1	167.6	172.3	147.9	153.7	171.5	185.5	188.8	170.9	174.0
1947 .....	169.1	193.7	190.2	176.8	157.3	159.2	130.3	136.1	171.4	188.5	195.8	174.8	170.3
1948 .....	163.2	196.1	191.4	173.7	143.0	156.3	122.6	138.7	161.5	169.9	190.4	176.7	165.3
1949 .....	165.6	187.9	177.8	170.0	174.6	178.4	134.0	135.2	165.1	154.2	163.0	152.2	163.2
1950 .....	134.5	152.6	159.6	151.3	161.5	161.1	117.1	141.2	162.0	175.5	181.5	165.4	155.3
1951 .....	160.3	157.6	161.4	162.8	161.2	130.6	84.8	72.1	59.1	144.0	157.3	144.5	133.0

## Cigarettes

1935 .....	65.2	69.4	66.2	72.2	86.6	96.4	93.4	95.7	95.7	83.7	95.1	86.8	83.9
1936 .....	57.7	72.6	70.5	88.1	97.0	95.8	103.2	100.9	97.0	101.1	103.6	77.7	88.8
1937 .....	87.0	86.6	82.6	103.8	110.4	117.8	120.0	124.6	118.0	111.3	109.1	98.1	105.8
1938 .....	85.1	97.4	95.3	111.5	111.7	119.1	123.1	120.8	117.6	113.0	113.0	95.8	108.6
1939 .....	91.9	92.8	89.6	104.2	108.7	118.9	127.8	130.4	115.1	138.8	127.0	106.8	112.7
1940 .....	110.0	96.0	106.4	123.8	150.5	120.0	123.4	121.2	124.4	143.9	141.2	116.3	123.1
1941 .....	122.1	124.4	145.4	132.9	132.5	144.2	154.8	174.9	182.6	171.6	171.1	147.8	150.4
1942 .....	154.1	178.6	166.7	170.7	168.6	169.2	176.4	191.9	198.7	223.8	249.5	214.0	188.5
1943 .....	194.9	232.3	223.4	233.5	212.5	179.8	185.8	211.2	211.2	225.3	240.8	220.4	214.3
1944 .....	259.2	255.4	252.6	190.2	212.1	231.0	222.7	260.3	269.2	251.6	258.0	260.5	243.6
1945 .....	265.6	295.3	296.2	276.4	265.0	276.4	249.0	262.9	285.8	297.4	313.0	249.0	277.7
1946 .....	283.0	230.2	194.5	208.9	212.1	241.2	218.0	254.4	261.6	269.9	277.7	236.7	240.7
1947 .....	238.6	253.7	244.0	238.2	259.5	251.4	167.1	236.7	275.0	288.1	279.2	244.2	248.0
1948 .....	252.6	261.4	223.4	250.9	250.5	270.5	184.3	250.1	283.4	286.0	282.6	245.4	253.4
1949 .....	251.2	244.6	252.0	277.9	287.7	296.8	194.7	269.6	304.5	283.2	287.3	265.2	267.9
1950 .....	264.7	300.4	293.4	286.6	291.5	309.8	206.4	250.1	285.3	280.3	261.8	240.3	272.6
1951 .....	279.0	305.9	304.3	281.5	270.7	263.5	195.3	169.2	152.7	333.3	263.9	176.0	249.6



## Cut Tobacco

(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	72.5	82.8	81.3	85.6	90.2	101.9	90.3	93.9	93.5	87.9	100.1	75.6	88.0
1936 .....	73.2	88.8	87.3	98.2	104.8	99.5	97.3	99.4	94.7	97.4	101.5	74.4	93.0
1937 .....	83.3	102.7	97.1	103.2	99.9	112.5	107.1	110.1	108.8	103.5	103.4	84.9	101.4
1938 .....	84.1	94.2	96.6	111.3	109.7	115.9	110.2	107.4	108.5	107.8	112.4	90.0	104.0
1939 .....	89.2	102.2	103.4	119.7	116.4	120.7	123.1	122.9	118.4	129.9	117.1	99.7	113.6
1940 .....	104.7	116.0	114.8	133.2	165.0	126.5	123.0	124.0	123.5	118.0	123.2	104.5	123.0
1941 .....	102.1	125.0	121.9	134.6	119.4	123.8	122.3	126.0	126.4	122.1	126.7	98.7	120.8
1942 .....	109.8	113.5	103.6	119.8	133.6	129.2	133.0	134.0	122.6	129.1	132.0	90.8	120.9
1943 .....	88.4	90.3	78.3	116.0	96.3	102.1	115.8	135.0	132.1	141.6	151.5	124.8	114.4
1944 .....	82.7	90.8	90.1	95.8	94.2	106.1	116.7	114.8	119.6	144.0	152.9	127.8	111.3
1945 .....	126.8	126.8	111.0	117.3	104.5	114.0	107.9	121.3	133.3	143.3	142.7	111.6	121.7
1946 .....	112.7	123.6	101.8	112.9	120.0	121.2	121.8	135.3	135.4	141.0	128.0	112.4	122.2
1947 .....	111.6	124.6	112.7	122.8	116.5	120.0	94.5	127.1	135.3	137.0	129.0	102.3	119.5
1948 .....	106.7	121.0	120.1	121.5	128.9	141.0	103.0	116.6	136.9	136.5	132.8	118.2	123.6
1949 .....	119.9	122.8	113.7	127.4	126.4	127.8	96.0	114.9	131.1	134.8	128.2	113.0	120.5
1950 .....	111.2	128.9	130.3	130.3	129.0	140.1	89.8	119.5	127.9	131.2	126.0	119.3	123.6
1951 .....	126.9	133.6	137.1	107.0	149.2	149.0	105.6	122.4	102.0	150.8	152.5	123.4	130.0

## Rubber Products

1935 .....	85.2	89.8	88.9	87.2	86.8	87.3	79.3	86.2	87.7	92.1	94.6	89.7	87.9
1936 .....	89.7	92.1	94.2	93.5	93.8	95.7	97.7	99.1	98.9	99.8	101.0	98.9	96.2
1937 .....	100.8	107.9	110.6	111.7	114.2	117.6	116.5	115.6	118.7	112.6	116.1	105.5	112.3
1938 .....	98.4	97.6	97.5	96.3	95.5	93.9	90.3	96.8	99.6	101.1	101.0	96.6	97.0
1939 .....	98.3	97.3	102.6	104.3	106.6	106.0	100.8	109.7	113.7	115.9	116.3	108.0	106.6
1940 .....	109.2	110.3	111.4	109.5	107.7	110.2	109.2	121.3	124.6	127.5	128.2	128.6	116.5
1941 .....	132.0	140.2	143.6	149.0	152.4	153.5	158.1	163.7	166.7	169.9	169.4	154.7	154.4
1942 .....	153.3	153.8	151.9	152.3	151.8	151.9	147.8	150.2	148.0	148.3	150.2	147.7	150.6
1943 .....	147.8	147.8	148.0	147.4	146.6	147.3	146.0	144.3	145.0	145.9	149.4	147.9	147.0
1944 .....	142.5	144.0	147.5	148.5	145.3	145.7	145.5	149.9	148.8	153.6	158.9	158.2	149.0
1945 .....	177.8	181.2	184.7	179.7	182.1	185.8	185.1	172.9	174.6	177.4	181.4	179.6	180.2
1946 .....	186.8	207.7	219.6	218.3	201.6	187.5	48.6	54.4	66.1	85.3	219.4	200.2	158.0
1947 .....	233.5	243.3	246.6	249.9	239.4	234.2	188.3	186.1	241.7	232.9	249.8	222.0	230.7
1948 P .....	243.3	258.0	253.1	242.5	227.4	241.9	182.6	165.9	214.5	238.6	242.4	220.8	227.6
1949 P .....	229.3	239.7	220.3	223.9	211.8	208.9	163.5	161.6	204.2	221.9	205.6	211.8	208.5
1950 P .....	217.9	250.3	235.3	255.0	223.0	252.1	230.2	211.5	276.4	284.9	288.3	297.9	251.9
1951 P .....	276.9	321.1	323.7	336.5	286.4	244.9	228.5	214.1	257.3	235.3	220.9	225.5	264.3

## Leather Products

1935 .....	78.6	95.7	103.7	109.3	104.0	99.2	89.6	104.9	102.7	92.9	86.1	84.5	95.9
1936 .....	84.7	102.0	109.1	109.9	98.4	94.0	88.1	102.2	104.1	92.7	86.1	84.3	96.3
1937 .....	89.7	113.4	122.0	118.4	117.1	114.1	104.9	115.2	110.5	97.0	84.6	80.6	105.7
1938 .....	83.8	100.4	104.0	102.8	97.0	87.6	85.5	100.8	100.1	87.0	88.2	81.9	93.3
1939 .....	88.3	106.3	111.2	103.6	104.2	99.5	98.8	114.0	114.7	126.4	123.9	113.9	108.7
1940 .....	116.3	129.5	127.6	122.7	116.4	102.8	97.8	115.9	124.4	118.4	112.7	108.3	116.1
1941 .....	111.9	132.3	136.0	144.0	143.7	145.3	141.1	147.8	150.1	150.1	152.2	138.7	141.1
1942 .....	140.5	157.1	158.5	156.5	151.9	151.4	140.4	146.4	147.8	150.8	155.6	143.1	150.0
1943 .....	146.6	159.3	160.5	158.4	157.4	152.2	147.2	148.0	144.4	148.9	149.2	140.9	151.1
1944 .....	145.1	156.7	160.5	155.5	153.5	151.3	134.9	144.2	146.4	150.8	154.2	141.7	149.6
1945 .....	144.9	161.5	162.9	161.8	156.0	158.6	135.5	146.8	151.2	162.0	166.3	152.2	155.0
1946 .....	162.8	172.7	182.2	179.3	174.0	176.1	144.8	168.1	165.9	165.1	169.2	154.4	167.9
1947 .....	156.3	172.7	172.3	171.5	161.5	149.2	126.2	135.4	136.7	132.6	143.5	127.0	148.7
1948 P .....	131.4	151.7	148.3	140.1	129.5	122.4	95.5	120.3	124.9	132.4	132.1	126.0	129.6
1949 P .....	129.1	147.8	147.1	147.7	138.3	136.2	107.1	126.5	138.6	132.7	128.9	121.9	133.5
1950 P .....	126.0	143.1	139.8	139.4	120.8	116.0	91.1	120.4	132.1	133.7	132.3	126.8	126.8
1951 P .....	131.4	149.0	152.5	145.8	127.6	111.1	79.9	106.5	106.3	101.8	102.9	89.5	117.0



## Leather Boots and Shoes

(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935.....	73.5	99.5	112.3	121.2	111.1	102.0	88.8	110.7	105.7	86.8	74.2	74.4	96.7
1936.....	81.6	108.0	118.5	118.3	97.4	89.9	82.7	104.1	105.6	83.9	71.1	71.3	94.4
1937.....	84.1	120.1	133.2	125.7	123.3	119.3	103.9	118.4	109.9	88.9	70.0	68.6	105.5
1938.....	82.7	108.6	113.6	113.0	104.9	89.7	86.0	107.3	103.2	79.6	80.6	74.7	95.3
1939.....	82.7	110.5	115.7	103.2	104.1	97.0	94.1	116.8	113.7	128.7	122.4	108.4	108.1
1940.....	111.4	130.9	128.8	121.2	113.5	96.2	89.8	115.2	125.8	112.8	98.8	98.1	111.9
1941.....	99.3	129.2	133.5	146.2	143.3	145.7	136.3	141.7	143.8	140.0	142.9	126.4	135.7
1942.....	127.5	153.8	155.6	153.6	146.5	146.6	126.3	136.5	140.7	143.9	151.2	131.9	142.8
1943.....	136.3	157.6	159.1	157.7	156.8	147.8	138.6	140.7	136.7	143.4	142.0	129.3	145.4
1944.....	134.6	154.6	161.3	154.0	152.3	148.5	121.5	137.1	141.3	146.5	150.9	130.4	144.4
1945.....	139.3	167.2	170.2	169.1	159.5	163.4	122.5	140.7	147.4	161.7	166.1	142.3	154.1
1946.....	164.8	179.2	195.1	190.3	181.7	185.9	129.1	170.0	166.5	164.2	171.5	149.3	170.6
1947.....	151.5	176.2	178.2	176.6	163.6	146.5	113.4	132.9	128.7	122.7	136.3	116.3	145.2
1948 <sup>P</sup> .....	126.9	154.6	158.8	151.4	134.8	123.6	87.6	123.2	127.7	134.6	133.4	121.4	131.5
1949 <sup>P</sup> .....	131.4	162.4	165.4	168.6	156.6	153.2	108.6	140.1	150.9	136.9	126.3	116.9	143.1
1950 <sup>P</sup> .....	127.2	157.6	156.5	153.2	129.1	123.2	89.6	128.0	140.7	139.2	134.6	123.6	133.5
1951 <sup>P</sup> .....	137.8	168.2	176.9	171.2	149.4	126.9	85.0	125.7	124.6	112.8	109.3	94.6	131.9

## Leather Tanneries

1935.....	96.9	98.2	98.3	97.8	98.7	98.8	99.1	101.1	101.3	102.9	104.2	101.4	99.9
1936.....	97.0	99.0	100.1	101.8	101.2	101.0	100.4	99.7	99.7	101.4	101.9	101.6	100.4
1937.....	104.8	108.4	107.8	103.8	108.6	104.9	105.9	109.0	106.9	100.0	95.7	92.4	104.4
1938.....	86.5	86.8	88.7	84.8	81.4	79.3	81.0	86.8	88.7	90.6	93.2	94.2	86.8
1939.....	100.0	103.1	106.2	102.4	100.9	101.2	102.7	104.7	111.0	118.5	124.8	127.4	108.5
1940.....	127.7	129.3	125.4	119.7	113.0	101.5	94.2	95.5	97.4	99.0	104.2	105.9	109.4
1941.....	110.3	113.9	113.9	114.7	115.9	117.2	122.0	124.4	128.0	134.4	138.1	137.5	122.5
1942.....	140.6	141.7	140.3	135.6	135.0	135.5	136.8	137.1	135.2	137.5	141.1	142.5	136.2
1943.....	145.6	147.0	146.0	143.5	141.0	140.6	141.2	140.3	136.4	137.4	140.3	142.1	141.8
1944.....	141.5	141.4	139.3	137.8	135.7	136.0	133.5	132.8	132.7	135.3	138.2	139.7	137.0
1945.....	135.9	136.5	135.3	132.0	131.9	132.8	134.4	136.4	138.8	143.0	148.3	150.9	138.0
1946.....	151.5	154.9	157.0	157.2	154.8	153.5	155.1	153.1	152.0	151.4	153.1	153.2	153.9
1947.....	155.3	162.1	157.9	163.8	157.6	151.8	130.0	120.3	133.3	131.5	144.3	131.2	144.9
1948 <sup>P</sup> .....	121.3	138.0	121.2	112.2	109.2	111.8	82.1	97.9	103.2	109.5	106.1	110.0	110.1
1949 <sup>P</sup> .....	108.7	114.7	107.4	106.7	99.5	101.4	83.2	82.3	97.5	102.2	112.8	110.0	102.2
1950 <sup>P</sup> .....	107.4	108.5	96.0	103.7	88.8	86.6	60.4	88.4	102.8	110.2	114.5	121.9	99.1
1951 <sup>P</sup> .....	116.8	120.6	116.1	105.4	87.6	78.5	45.4	61.2	64.5	71.9	84.3	68.7	85.1

## Textile Products (Except Clothing)

1935.....	87.1	92.0	89.7	89.9	87.3	91.5	89.4	87.7	92.8	93.2	96.2	96.6	91.1
1936.....	100.3	102.6	99.7	101.1	101.0	100.4	98.5	100.6	100.9	101.9	108.2	105.1	101.7
1937.....	107.6	115.3	119.0	119.1	117.6	120.6	108.6	83.7	115.0	110.0	108.1	97.9	110.2
1938.....	91.9	90.6	90.3	89.5	86.6	85.2	80.8	84.7	92.1	91.4	90.8	91.4	88.8
1939.....	91.1	93.0	98.0	96.5	98.1	104.1	102.6	111.3	112.8	124.2	137.6	128.8	108.2
1940.....	132.0	155.7	149.2	145.7	143.2	145.0	140.9	148.1	147.6	154.3	155.6	153.8	147.6
1941.....	152.7	166.5	163.5	168.6	161.9	166.6	167.9	161.9	174.4	180.7	177.3	168.3	167.5
1942.....	181.8	190.2	197.5	195.1	188.5	180.2	186.3	184.6	183.1	186.1	188.9	179.5	186.8
1943.....	175.8	187.6	186.0	180.0	175.0	172.5	165.8	166.4	165.9	163.0	165.7	161.7	172.1
1944.....	160.6	169.4	172.0	167.3	163.8	156.7	152.7	156.5	157.1	162.8	167.9	157.3	162.0
1945.....	162.8	171.9	169.8	164.1	161.1	159.4	148.5	147.4	157.2	163.1	163.6	157.2	160.5
1946.....	161.5	170.7	171.4	166.6	163.9	151.7	147.9	152.5	160.3	163.3	166.2	164.3	161.7
1947.....	163.8	177.9	184.1	178.7	175.9	170.5	165.2	165.6	172.7	174.2	174.2	171.6	172.9
1948 <sup>P</sup> .....	173.9	185.8	184.5	184.7	180.0	173.9	167.0	166.8	179.9	182.7	191.3	192.1	180.2
1949 <sup>P</sup> .....	190.7	200.5	203.9	202.0	181.8	184.2	161.6	170.3	184.2	182.4	185.4	185.4	186.0
1950 <sup>P</sup> .....	201.2	226.6	224.0	227.9	196.6	199.7	176.2	180.5	228.0	221.8	232.4	233.7	212.4
1951 <sup>P</sup> .....	215.2	249.1	250.6	250.3	220.5	226.2	155.0	174.0	204.6	180.4	185.8	191.8	208.6

## Cotton Goods

(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	78.2	88.9	82.1	83.5	77.7	86.7	81.5	75.6	84.6	83.0	88.9	91.6	83.5
1936 .....	102.0	107.6	100.4	104.8	105.2	104.3	100.8	103.7	95.9	102.1	116.5	108.0	104.3
1937 .....	107.5	123.2	131.5	131.5	126.5	134.3	109.2	45.5	122.3	110.6	108.0	86.1	111.4
1938 .....	86.3	84.3	90.1	92.0	88.3	84.5	71.2	78.2	95.5	90.2	85.4	87.9	86.2
1939 .....	78.0	89.8	97.4	93.6	97.0	115.3	109.1	125.7	120.4	137.3	167.2	144.7	114.6
1940 .....	133.8	188.4	167.5	157.3	169.2	157.3	143.4	154.2	147.4	159.5	161.8	161.1	158.4
1941 .....	157.7	188.5	176.4	186.9	168.7	176.1	175.6	155.6	164.0	199.9	189.0	170.6	177.4
1942 .....	182.2	204.3	216.2	209.2	192.6	168.9	184.0	177.6	175.8	180.0	187.6	166.5	187.1
1943 .....	154.9	187.2	186.7	175.3	165.8	159.5	144.4	145.9	147.9	140.7	147.4	139.7	158.0
1944 .....	137.0	156.6	159.4	147.4	142.4	125.8	122.3	125.0	124.3	134.0	144.5	128.2	137.2
1945 .....	130.0	151.1	154.6	142.0	134.7	132.4	108.7	104.9	132.6	144.7	139.7	125.2	133.4
1946 .....	132.1	151.7	150.6	141.7	136.9	103.6	95.3	106.0	125.4	130.1	132.8	127.7	127.8
1947 .....	121.7	155.0	166.8	154.6	150.7	139.1	125.0	122.1	136.5	134.2	128.2	122.0	138.0
1948 P .....	131.9	151.3	144.5	146.5	141.8	137.3	125.3	117.7	138.2	135.5	146.0	142.7	138.2
1949 P .....	145.3	160.3	154.2	159.7	132.0	134.0	113.5	104.2	135.4	140.3	151.2	151.8	140.2
1950 P .....	150.6	169.2	165.4	171.2	160.1	162.0	158.2	117.8	173.1	166.6	184.0	171.4	162.5
1951 P .....	162.9	191.3	198.4	201.0	184.4	182.5	126.8	118.0	154.7	148.9	146.2	120.2	161.3

## Woollen Goods

1935 .....	93.6	95.7	97.2	93.8	91.5	94.8	96.4	97.0	99.0	101.4	104.4	104.0	97.4
1936 .....	103.2	102.6	102.2	99.5	99.1	100.2	101.2	102.7	105.1	106.0	108.4	109.0	103.3
1937 .....	112.7	115.8	116.2	113.9	115.9	117.3	108.8	110.9	112.7	111.6	110.2	105.4	112.6
1938 .....	92.7	88.3	81.8	77.7	74.9	79.3	80.4	82.1	83.9	86.3	86.7	84.9	83.2
1939 .....	93.0	91.7	90.8	91.8	93.9	96.5	100.5	103.6	111.5	119.6	123.9	124.8	103.5
1940 .....	137.3	142.7	145.2	148.1	147.5	150.1	153.3	155.5	156.4	156.0	154.9	150.2	149.8
1941 .....	145.3	145.8	146.5	147.5	147.8	148.7	152.0	154.3	157.1	159.7	164.3	163.7	152.7
1942 .....	179.2	177.1	184.9	186.1	183.4	186.1	185.3	184.1	182.1	181.9	182.5	179.3	182.7
1943 .....	175.9	174.6	173.4	170.4	168.3	167.6	165.6	163.3	162.2	162.3	164.2	161.1	167.4
1944 .....	164.3	165.6	165.9	164.8	160.3	159.3	159.3	159.8	159.4	160.8	161.5	143.7	160.4
1945 .....	157.7	158.4	157.9	156.0	157.1	159.5	159.4	160.7	163.2	166.6	170.5	169.8	161.4
1946 .....	169.9	170.3	173.2	169.0	168.7	172.1	173.5	173.8	174.6	178.0	181.2	180.1	173.7
1947 .....	180.4	183.5	181.5	178.6	175.5	177.3	174.9	178.1	178.5	181.0	184.0	183.3	179.7
1948 P .....	178.8	183.1	184.9	181.7	172.5	164.8	164.1	166.6	165.3	163.6	169.5	172.7	172.3
1949 P .....	178.0	181.9	176.4	184.3	154.1	162.8	142.5	159.6	155.4	149.2	146.2	149.7	161.7
1950 P .....	147.0	164.9	166.9	178.7	138.4	154.7	133.9	145.4	178.4	166.1	171.9	177.7	160.3
1951 P .....	174.0	187.9	183.5	184.3	134.9	142.3	94.9	124.2	133.6	119.0	128.4	139.2	145.5

## Synthetic Textiles and Silk

1935 .....	97.7	99.4	99.3	100.7	101.0	100.7	100.1	101.6	104.0	104.9	104.4	104.5	101.5
1936 .....	99.3	101.0	99.7	99.5	97.4	95.7	93.7	96.8	108.6	99.3	99.8	99.7	99.2
1937 .....	103.7	106.6	106.4	106.8	105.7	102.2	103.3	106.4	105.9	104.2	104.3	105.8	105.1
1938 .....	96.6	98.0	92.8	90.9	88.5	84.7	88.2	91.2	96.2	97.2	99.0	99.5	93.6
1939 .....	104.9	92.6	101.1	98.1	96.5	88.5	90.0	96.4	102.2	110.5	112.2	113.5	100.5
1940 .....	111.6	112.7	114.7	115.0	78.5	110.8	111.0	115.6	117.0	120.1	123.5	124.4	112.9
1941 .....	133.9	136.8	137.9	138.3	140.9	146.9	150.3	150.6	153.4	153.3	153.5	151.9	145.6
1942 .....	161.1	161.8	163.6	163.4	163.9	166.8	169.0	171.8	173.1	173.9	175.8	173.7	168.2
1943 .....	174.8	173.1	174.3	171.7	172.9	175.6	174.0	174.2	172.8	174.8	175.3	175.1	174.1
1944 .....	178.0	180.4	180.8	180.8	178.6	177.3	178.2	177.1	176.9	178.0	183.5	182.5	179.5
1945 .....	182.2	183.4	182.7	180.1	180.6	179.0	180.2	181.8	182.5	185.8	190.4	189.9	183.2
1946 .....	196.6	200.4	200.5	197.0	196.2	198.1	195.0	198.5	199.1	199.8	203.4	201.0	198.3
1947 .....	211.3	214.8	216.5	215.1	214.8	213.5	217.0	221.1	223.7	229.4	235.0	236.7	220.7
1948 P .....	236.4	247.7	255.4	259.4	260.5	249.9	237.6	248.7	270.3	284.6	298.0	306.7	262.9
1949 P .....	295.0	308.7	343.3	318.8	315.8	322.4	266.6	305.7	311.0	293.1	286.2	285.3	304.3
1950 P .....	369.0	437.4	428.1	427.0	340.8	339.3	251.5	339.3	425.0	409.6	419.6	449.3	386.1
1951 P .....	376.0	473.0	472.6	467.2	409.2	444.4	251.5	338.5	412.7	319.9	340.4	409.6	392.9



## Clothing (Textile and Fur)

(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	82.5	88.1	91.9	93.9	92.9	91.6	83.7	92.5	99.7	99.8	95.6	89.6	91.8
1936 .....	88.6	94.3	98.4	99.8	98.4	96.8	89.7	97.5	103.1	103.6	99.6	94.5	97.0
1937 .....	95.2	102.6	107.0	108.1	107.1	106.5	99.1	105.0	110.3	110.3	105.8	100.0	104.8
1938 .....	93.5	97.7	100.9	101.1	98.5	95.2	91.9	99.2	104.8	104.4	100.6	93.6	98.4
1939 .....	98.3	102.5	105.7	105.6	105.6	103.1	100.0	108.0	114.7	119.5	119.5	113.6	108.0
1940 .....	115.0	120.0	123.4	123.0	123.7	120.2	121.2	130.6	136.0	135.5	132.7	124.8	125.5
1941 .....	129.8	134.3	138.5	139.7	139.7	136.5	137.9	147.6	151.4	152.0	150.5	144.0	141.8
1942 .....	154.2	160.1	163.9	164.7	163.9	160.2	159.6	164.5	165.1	164.8	163.3	158.4	161.9
1943 .....	160.7	162.7	163.2	161.9	159.5	156.1	152.4	154.5	155.1	154.5	153.7	146.7	156.7
1944 .....	147.2	149.5	150.7	149.8	147.5	145.6	141.1	145.2	147.3	148.7	148.9	143.8	147.1
1945 .....	143.6	145.7	147.0	146.2	145.1	144.7	140.8	144.8	150.0	153.0	153.0	145.8	146.6
1946 .....	150.9	152.1	153.8	153.7	153.0	151.3	147.1	151.8	154.6	158.2	156.9	151.0	152.9
1947 .....	145.3	148.4	150.2	149.7	147.5	145.6	142.8	145.4	148.5	151.3	151.2	147.1	147.7
1948 P .....	157.0	160.4	158.6	156.3	153.3	146.5	144.8	146.6	154.4	162.8	165.2	165.9	156.0
1949 P .....	165.9	168.2	169.2	167.6	156.3	149.1	145.7	153.5	160.0	161.3	159.7	156.5	159.4
1950 P .....	155.4	156.4	159.9	160.3	152.1	147.7	143.2	148.6	156.4	162.9	162.8	162.8	155.7
1951 P .....	163.7	165.0	167.3	167.5	158.3	149.5	139.4	141.3	142.8	139.2	134.3	128.0	149.7

## Paper Products

1935 .....	83.8	83.2	84.1	85.1	89.0	92.1	93.5	94.0	94.7	95.0	93.2	91.7	90.0
1936 .....	90.3	90.7	92.5	95.3	98.3	101.1	103.4	103.5	104.0	104.4	102.8	100.3	98.9
1937 .....	105.6	106.9	108.9	112.5	116.4	120.7	120.6	121.2	120.6	117.0	111.5	105.8	114.0
1938 .....	95.3	93.1	92.0	89.4	88.9	89.4	91.4	92.8	94.5	93.8	92.4	87.6	91.7
1939 .....	92.8	94.8	96.2	97.3	101.8	107.8	109.0	108.8	112.9	116.3	114.6	112.2	105.4
1940 .....	113.2	114.2	114.3	118.3	126.9	134.4	135.3	136.0	136.3	134.4	129.5	126.6	126.6
1941 .....	129.7	130.5	131.2	134.2	141.5	146.9	149.2	153.0	154.7	154.6	152.0	147.4	143.7
1942 .....	142.5	143.5	143.8	144.7	147.4	148.6	148.3	146.0	143.3	140.1	137.7	134.5	143.4
1943 .....	131.7	131.6	133.8	134.4	137.7	144.2	146.5	147.4	145.7	143.9	143.7	139.4	140.0
1944 .....	141.8	145.5	146.1	156.7	147.6	146.6	147.9	154.4	148.4	155.2	153.0	145.4	149.1
1945 .....	149.1	153.4	157.5	157.3	155.7	163.7	160.8	163.7	164.8	173.1	174.1	161.4	161.2
1946 .....	175.8	181.3	184.1	191.0	186.6	188.9	183.4	192.1	190.5	200.0	202.5	190.3	188.9
1947 .....	202.0	202.7	207.2	212.4	206.9	210.2	202.2	210.4	205.6	212.6	215.0	202.0	207.4
1948 P .....	206.2	216.8	223.9	222.2	222.5	220.0	212.5	217.3	214.5	224.9	224.5	206.8	217.7
1949 P .....	209.3	215.3	210.9	216.2	212.4	212.9	201.8	211.0	215.7	226.6	223.4	208.7	213.7
1950 P .....	211.8	218.7	220.2	227.8	226.3	233.3	228.3	231.4	239.9	249.3	245.6	231.9	230.4
1951 P .....	232.4	244.8	250.7	250.7	254.3	251.4	246.3	253.9	246.0	253.7	254.4	234.5	247.8

## Pulp and Paper

1935 .....	86.8	86.0	86.8	87.8	92.6	96.5	98.1	98.1	98.3	98.4	95.7	94.2	93.3
1936 .....	92.4	92.8	94.5	97.6	101.3	104.4	106.9	106.7	106.6	106.7	104.3	101.7	101.3
1937 .....	107.3	108.4	109.1	113.6	118.9	123.7	123.8	124.2	122.9	118.0	111.0	105.0	115.5
1938 .....	93.5	90.6	89.0	85.7	85.0	85.7	87.9	89.2	90.7	89.3	87.4	82.9	88.1
1939 .....	88.1	90.7	92.1	93.2	98.6	105.8	107.0	106.3	109.4	111.8	109.4	108.2	101.7
1940 .....	108.8	110.3	110.4	115.5	125.5	134.1	135.2	135.9	135.2	131.8	125.2	122.5	124.2
1941 .....	124.1	124.7	124.4	126.9	134.8	140.0	141.7	144.9	145.5	144.2	140.7	136.6	135.7
1942 .....	131.3	132.5	132.9	134.0	137.8	138.4	138.6	135.7	133.0	128.8	125.7	123.0	132.7
1943 .....	119.9	119.7	121.6	122.5	126.7	131.9	134.9	134.9	132.8	129.1	127.9	123.2	127.1
1944 .....	125.6	130.0	131.0	144.8	134.3	131.6	133.4	141.5	134.2	142.1	138.7	130.6	134.8
1945 .....	134.0	138.4	142.4	142.7	140.2	147.9	143.6	146.6	146.7	156.1	155.4	141.8	144.7
1946 .....	159.5	166.1	168.8	178.0	171.9	172.2	164.9	175.0	171.8	181.8	184.2	171.0	172.1
1947 .....	184.4	185.0	190.1	196.5	189.3	192.3	182.9	193.9	187.5	195.7	198.3	182.8	189.9
1948 P .....	186.9	197.4	206.4	206.6	209.2	206.7	197.2	202.1	195.1	204.9	205.1	186.5	200.3
1949 P .....	191.9	200.9	195.8	201.8	195.2	193.7	178.7	186.9	188.1	201.2	198.8	184.8	193.2
1950 P .....	190.0	199.6	201.6	209.0	207.0	211.5	204.5	208.5	216.6	224.9	224.8	212.5	209.2
1951 P .....	212.3	227.0	234.3	232.4	237.1	234.6	228.3	237.2	226.8	236.9	242.1	222.8	231.0



**Newsprint**  
(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935.....	77.4	77.7	81.9	92.0	93.1	96.0	89.8	90.3	92.6	102.2	104.6	97.4	91.2
1936.....	87.7	92.1	97.4	107.5	106.6	107.8	105.6	107.8	107.7	115.8	118.7	111.3	105.5
1937.....	115.3	119.2	120.3	118.1	123.6	124.2	121.2	127.3	124.3	125.6	120.5	112.5	121.0
1938.....	88.6	87.4	86.1	83.1	82.7	80.3	80.6	84.5	92.3	101.4	97.6	80.4	87.1
1939.....	82.7	86.2	84.3	94.9	95.5	95.5	90.3	90.5	100.5	111.5	114.6	95.5	95.2
1940.....	96.5	96.3	104.4	107.4	124.4	131.0	127.9	121.7	117.3	119.2	112.7	101.0	113.3
1941.....	100.2	105.9	109.8	115.8	109.2	113.2	112.5	116.6	118.7	122.2	124.2	115.3	113.6
1942.....	119.6	119.9	117.7	114.9	100.2	96.6	92.5	100.8	102.5	104.1	103.9	93.6	105.5
1943.....	93.0	95.6	94.7	95.0	101.1	102.6	100.6	103.3	100.2	103.2	102.0	95.7	98.9
1944.....	96.6	99.3	96.7	101.9	100.6	98.3	97.3	100.6	97.2	102.8	102.2	97.5	99.3
1945.....	101.5	103.3	105.0	101.5	101.4	106.0	107.7	110.1	111.7	119.2	119.1	110.2	108.1
1946.....	125.9	133.0	133.0	139.8	138.0	138.3	136.9	142.1	136.6	144.3	145.0	136.1	137.4
1947.....	146.8	146.7	147.8	152.4	146.9	146.7	145.0	150.0	145.3	151.4	150.3	140.9	147.5
1948.....	142.9	149.1	154.8	153.9	155.1	152.9	150.5	155.3	150.1	159.6	158.6	148.4	152.6
1949.....	153.6	160.6	159.4	167.0	160.7	158.7	153.0	156.3	150.7	158.2	158.6	145.1	158.8
1950.....	151.0	156.5	157.4	165.8	160.3	159.6	159.0	162.5	158.4	165.2	165.3	155.9	159.7
1951.....	158.5	167.2	171.7	168.9	169.9	168.6	164.3	169.5	162.7	172.3	171.3	158.0	166.9

**Printing, Publishing and Allied Industries**

1935.....	92.1	91.8	91.9	92.8	94.1	94.2	93.6	93.8	94.7	95.6	95.6	96.7	93.9
1936.....	97.3	97.7	98.0	98.5	98.6	100.2	99.4	98.7	99.7	100.4	102.2	103.3	99.5
1937.....	103.6	105.0	105.5	106.5	106.9	107.5	106.1	105.2	105.3	105.3	104.9	104.8	105.6
1938.....	99.9	100.3	99.4	99.6	98.9	98.5	97.8	97.9	98.4	98.6	99.1	98.4	98.9
1939.....	101.1	101.3	101.8	102.3	103.8	102.8	102.0	101.6	101.3	102.1	103.8	102.4	102.2
1940.....	100.1	100.5	101.1	101.1	101.1	100.6	100.9	101.7	102.5	103.6	103.9	106.5	102.1
1941.....	108.8	109.7	111.1	112.4	113.7	114.0	114.2	114.1	115.3	115.8	116.1	115.2	113.4
1942.....	116.5	117.9	116.3	114.8	117.0	115.3	114.2	113.1	112.3	111.9	112.2	111.3	114.4
1943.....	109.8	110.5	109.6	108.9	108.7	111.1	112.6	113.9	112.9	114.2	114.2	114.0	111.7
1944.....	113.0	114.0	113.5	113.4	113.2	115.6	114.8	114.5	114.8	116.5	118.4	117.1	114.9
1945.....	120.4	121.4	121.5	121.1	122.5	125.4	125.1	124.8	127.7	132.0	134.6	133.3	125.8
1946.....	136.0	137.1	138.1	139.3	140.9	142.8	144.5	146.2	147.4	150.2	152.7	150.9	143.8
1947.....	157.0	159.2	158.6	159.5	161.5	164.8	165.1	164.3	165.7	167.0	169.6	167.1	163.3
1948 P.....	168.9	177.2	177.3	174.2	177.5	177.9	173.2	174.2	178.3	184.4	179.6	183.5	177.2
1949 P.....	180.3	188.2	179.4	190.8	187.5	189.0	180.8	174.4	180.4	180.3	185.0	190.0	183.8
1950 P.....	189.3	194.2	191.1	199.9	190.2	192.7	194.6	176.7	195.7	205.9	205.3	208.0	195.3
1951 P.....	189.0	197.7	200.9	189.1	197.6	191.1	192.2	189.8	192.6	202.0	197.3	196.8	194.7

**Products of Petroleum and Coal**

1935.....	86.8	84.8	84.7	84.3	85.9	87.5	86.5	88.5	90.7	92.1	91.5	87.7	87.6
1936.....	92.4	91.9	91.8	93.6	95.9	97.8	97.1	97.7	98.3	99.4	98.2	94.7	95.7
1937.....	96.7	98.3	102.4	104.1	106.5	106.9	108.9	108.5	107.8	106.7	106.1	102.2	104.6
1938.....	103.7	104.1	105.1	107.5	103.8	102.8	100.2	101.9	102.9	100.8	100.8	98.8	102.7
1939.....	100.2	99.9	100.9	106.3	110.9	112.3	109.4	110.7	112.2	117.4	116.9	115.1	109.4
1940.....	116.9	115.4	119.3	123.1	124.1	125.6	129.4	131.6	130.9	130.3	132.6	132.0	125.9
1941.....	128.7	129.1	132.3	137.0	141.3	145.9	145.7	151.3	155.7	148.0	151.6	125.7	141.1
1942.....	134.1	127.3	127.0	119.3	141.6	146.0	138.2	145.6	139.8	159.4	148.9	130.8	138.2
1943.....	124.1	128.0	138.1	134.4	148.4	144.7	155.5	156.6	169.5	168.5	177.6	154.1	150.0
1944.....	151.8	161.3	147.2	171.5	175.5	184.9	173.9	185.0	171.6	189.2	184.1	165.2	171.8
1945.....	160.0	150.2	157.9	168.1	163.8	181.5	179.2	183.5	182.9	180.9	169.1	133.5	167.5
1946.....	147.1	145.5	157.9	156.6	178.2	170.2	166.0	168.7	177.7	184.7	182.7	173.1	167.4
1947.....	160.8	171.8	157.1	163.5	191.2	192.4	189.3	191.7	190.9	187.0	199.2	179.8	181.2
1948 P.....	172.0	167.6	169.6	178.7	203.5	209.9	212.1	216.9	226.5	226.0	221.9	182.8	199.0
1949 P.....	190.9	196.1	181.2	194.3	241.1	229.6	237.0	229.5	236.9	233.0	237.3	209.6	218.0
1950 P.....	209.3	212.2	203.3	220.6	241.6	268.5	268.1	258.9	272.3	265.9	262.9	238.6	243.5
1951 P.....	243.4	231.8	239.3	211.5	291.5	308.9	296.5	317.4	293.7	301.8	292.7	270.4	274.9

## Coke and Gas Products

(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935	92.5	92.5	91.3	88.7	85.3	85.8	81.5	81.0	85.8	94.4	98.3	99.7	89.8
1936	105.8	105.7	100.8	101.1	99.9	102.7	95.9	95.4	97.6	105.8	107.2	108.4	102.2
1937	108.0	108.9	113.2	109.6	108.0	107.6	105.2	106.4	107.1	108.9	112.2	110.8	108.8
1938	113.0	111.6	110.4	112.7	105.7	101.0	93.1	92.6	96.8	93.6	94.2	96.7	101.8
1939	95.5	92.2	89.9	92.8	92.3	91.8	89.6	91.6	92.4	108.4	113.5	116.9	97.3
1940	126.2	118.7	122.1	121.8	125.5	128.9	129.0	128.5	130.2	131.6	133.6	133.6	127.5
1941	132.9	131.8	131.7	134.0	128.7	127.3	128.7	131.7	134.7	136.9	138.6	140.0	133.1
1942	139.9	140.8	143.8	145.3	139.3	140.3	137.9	136.6	138.1	137.7	137.1	134.9	139.4
1943	110.2	131.1	130.1	134.6	129.8	127.8	144.6	148.2	160.3	167.2	169.2	167.3	143.4
1944	173.9	179.0	160.7	186.2	179.2	179.1	169.3	170.4	172.6	176.4	181.4	173.2	176.8
1945	184.0	188.9	187.3	182.4	179.9	178.8	173.4	171.2	174.3	170.0	163.6	121.4	172.9
1946	155.5	162.7	160.2	147.9	137.7	149.7	104.3	102.3	106.3	136.1	161.5	155.9	140.1
1947	166.9	162.3	151.9	151.2	142.9	139.4	133.8	135.2	146.8	144.3	157.2	162.1	149.6
1948 <sup>P</sup>	165.2	161.1	170.8	166.5	169.1	169.5	162.7	171.3	170.6	176.0	177.3	176.2	169.7
1949 <sup>P</sup>	177.7	180.7	175.3	160.3	174.5	171.8	150.0	153.3	160.1	159.3	159.1	164.7	167.2
1950 <sup>P</sup>	167.3	166.4	166.2	181.0	169.2	175.4	168.9	165.3	172.3	175.6	179.5	177.0	172.0
1951 <sup>P</sup>	178.7	182.2	177.0	171.4	168.2	169.0	161.9	163.1	163.4	173.0	180.4	175.0	171.9

## Petroleum Products

1935	34.2	81.3	81.7	82.3	86.2	88.3	88.8	91.8	92.9	91.0	88.4	82.3	86.6
1936	86.4	85.7	87.8	90.2	94.1	95.6	97.6	98.7	98.6	96.5	94.1	88.6	92.8
1937	91.7	93.6	97.6	101.7	105.8	106.6	110.6	109.4	108.1	105.7	103.3	98.3	102.7
1938	99.6	100.8	102.7	105.2	102.9	103.6	103.4	106.0	105.6	104.1	103.7	99.7	103.1
1939	102.3	103.3	105.8	112.3	119.3	121.5	118.3	119.2	121.1	121.5	118.4	114.3	114.8
1940	112.7	113.9	118.0	123.7	123.5	124.1	129.6	133.0	131.2	129.7	132.2	131.3	125.2
1941	126.8	127.9	132.5	138.4	146.9	154.3	153.3	160.1	165.1	153.0	157.4	119.3	144.6
1942	131.5	121.3	119.4	107.6	142.6	148.6	138.4	149.7	140.5	169.2	154.2	129.0	137.7
1943	130.3	126.6	141.7	134.3	156.8	152.3	160.4	160.3	173.6	169.1	181.4	148.2	152.9
1944	141.9	153.4	132.2	164.9	173.9	187.5	176.0	191.6	171.1	195.0	185.3	161.6	169.5
1945	149.3	132.8	144.7	161.7	156.6	182.7	181.8	189.0	186.7	185.8	171.5	138.9	165.1
1946	143.4	137.8	156.9	160.5	196.3	179.4	193.6	198.4	209.7	206.5	192.2	180.8	179.6
1947	158.1	176.0	159.4	169.0	212.8	216.2	214.2	217.0	210.6	206.1	218.1	187.8	195.4
1948 <sup>P</sup>	175.0	170.5	169.0	184.2	218.9	228.0	234.3	237.4	251.6	248.4	241.9	185.7	212.1
1949 <sup>P</sup>	196.8	203.0	183.8	200.6	271.0	255.5	276.0	263.6	271.3	266.1	272.4	229.8	240.8
1950 <sup>P</sup>	228.2	232.7	219.9	236.3	274.0	310.2	312.6	300.9	317.1	306.4	300.3	266.2	275.6
1951 <sup>P</sup>	272.4	254.1	267.2	229.5	346.8	371.6	356.9	386.5	352.1	359.5	343.0	313.2	321.1

## Chemicals and Allied Products

1935	81.4	82.3	84.5	71.7	89.0	88.7	88.0	87.3	89.0	89.9	89.4	87.4	85.7
1936	86.7	87.7	89.6	90.6	92.0	92.2	92.2	92.6	94.9	95.1	96.7	95.2	92.1
1937	97.7	100.4	104.3	107.2	110.8	110.9	109.3	110.4	111.4	112.6	109.3	104.7	107.4
1938	102.3	102.7	104.9	104.6	104.9	103.3	103.0	104.3	104.5	106.5	102.0	98.9	103.5
1939	94.6	106.7	108.1	109.8	111.2	110.6	109.3	111.0	116.6	119.8	120.3	117.1	111.3
1940	122.0	124.0	125.4	128.0	131.8	138.9	138.7	142.4	144.1	141.9	148.5	149.3	136.2
1941	146.6	150.5	160.1	173.0	186.5	193.8	202.7	223.4	237.3	260.8	292.2	304.1	210.9
1942	329.4	341.9	347.2	347.0	341.9	334.3	338.5	339.8	348.5	354.4	362.8	363.3	345.8
1943	369.6	370.4	374.0	373.5	371.1	363.2	359.8	363.1	366.5	372.8	375.7	371.7	369.3
1944	375.4	372.4	375.7	373.2	381.3	391.3	397.9	405.4	403.5	406.0	408.2	394.2	390.4
1945	382.0	383.6	384.6	374.6	340.8	285.5	263.0	239.6	221.2	216.2	210.5	211.7	292.8
1946	205.2	213.9	222.9	230.8	239.4	249.1	246.7	246.7	244.1	249.9	253.3	250.4	237.7
1947	242.7	250.2	257.1	258.4	252.2	254.0	244.8	245.8	232.2	239.9	242.9	226.0	245.5
1948 <sup>P</sup>	233.8	249.2	250.7	253.9	254.7	248.0	238.3	239.5	239.2	239.4	241.0	230.9	243.2
1949 <sup>P</sup>	235.8	240.0	235.3	246.3	248.3	248.7	235.5	238.2	239.3	240.9	236.7	229.3	239.5
1950 <sup>P</sup>	236.9	240.6	243.6	257.9	257.0	262.8	251.6	253.3	260.9	256.5	264.1	259.5	253.7
1951 <sup>P</sup>	259.1	263.0	265.0	275.0	273.2	277.1	267.1	265.3	268.6	269.6	268.2	262.1	267.8



## Durable Manufactures

(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	70.1	78.4	82.5	86.5	85.9	36.2	34.0	81.8	81.9	84.6	86.6	84.0	82.7
1936 .....	95.1	88.2	92.5	99.3	98.7	97.6	93.9	90.6	90.6	90.9	93.0	96.2	93.1
1937 .....	100.2	105.5	113.0	113.8	120.9	124.0	119.0	115.9	112.9	112.0	112.5	108.9	113.2
1938 .....	103.3	104.3	105.7	111.7	111.1	109.1	102.3	100.1	98.0	96.0	100.1	97.0	103.2
1939 .....	95.7	98.4	101.2	106.8	109.4	110.7	108.3	105.8	108.6	114.3	118.1	116.9	107.9
1940 .....	124.2	129.1	134.5	138.3	144.8	147.8	150.5	155.5	161.8	167.1	170.5	171.9	149.7
1941 .....	182.8	191.3	200.1	209.5	215.7	221.0	223.6	225.6	233.6	237.2	240.8	240.7	218.5
1942 .....	253.6	263.7	270.5	279.6	285.3	291.6	294.5	296.8	299.3	303.8	309.4	309.8	288.1
1943 .....	315.4	323.0	327.5	330.5	331.5	334.5	335.7	339.0	339.7	340.6	341.8	337.7	333.0
1944 .....	343.0	350.0	352.5	350.9	352.3	360.6	347.7	340.4	329.7	326.0	318.3	304.6	340.1
1945 .....	298.3	297.2	296.2	292.5	287.6	280.2	287.5	252.6	229.1	223.1	213.8	207.5	262.1
1946 .....	200.9	199.5	206.4	213.0	212.9	210.1	204.9	197.5	193.8	200.3	212.7	209.5	205.1
1947 .....	220.4	226.8	230.4	234.3	233.6	238.6	230.7	229.8	238.2	242.6	242.7	233.5	233.5
1948 <sup>P</sup> .....	235.8	240.3	249.6	248.2	247.2	246.6	233.4	237.6	249.1	251.4	251.6	242.1	244.4
1949 <sup>P</sup> .....	241.3	245.9	252.9	253.3	250.7	255.0	237.9	240.2	249.1	246.8	243.8	239.0	246.3
1950 <sup>P</sup> .....	231.8	240.6	243.7	247.3	251.7	269.9	262.4	254.1	277.6	279.7	279.2	271.7	259.1
1951 <sup>P</sup> .....	278.4	290.5	299.2	297.2	299.4	301.5	278.7	276.7	285.5	281.3	279.4	263.5	285.9

## Wood Products

1935 .....	69.6	74.4	79.2	84.7	92.9	100.4	98.3	93.8	90.1	85.9	79.0	75.0	85.3
1936 .....	80.3	82.4	89.6	95.3	105.3	109.9	108.3	105.1	100.9	97.7	88.8	85.1	95.8
1937 .....	89.3	93.5	101.9	109.8	120.4	126.6	124.8	120.7	117.4	108.8	95.9	87.5	108.0
1938 .....	88.4	91.8	98.2	107.8	118.5	122.8	118.9	112.2	104.4	93.5	87.7	82.6	102.2
1939 .....	91.3	95.8	100.9	107.7	125.6	129.2	125.3	119.6	113.1	106.3	98.9	92.1	108.8
1940 .....	111.0	115.2	119.1	129.0	144.7	149.6	148.6	144.5	141.8	136.2	126.1	119.0	132.1
1941 .....	130.6	134.7	140.4	149.9	165.8	170.7	169.0	163.3	157.7	148.9	139.1	131.6	150.2
1942 .....	144.2	149.0	154.3	159.2	173.8	178.6	172.6	164.7	154.8	146.0	140.3	135.0	156.0
1943 .....	132.3	135.8	139.9	146.9	160.5	171.1	168.2	160.7	153.3	143.1	138.6	131.0	148.4
1944 .....	133.6	137.2	144.5	155.4	170.2	178.5	173.8	167.0	157.8	148.1	141.4	133.6	153.4
1945 .....	137.5	141.0	148.4	161.1	172.8	178.0	172.6	165.7	157.1	150.4	144.7	137.4	155.6
1946 .....	147.2	151.8	160.5	179.6	185.7	190.9	196.6	193.1	186.0	176.2	169.4	162.4	175.0
1947 .....	178.2	190.2	189.1	185.6	194.0	219.6	222.4	224.0	212.4	194.4	173.6	164.2	195.6
1948 <sup>P</sup> .....	190.2	204.8	205.3	188.9	210.9	222.4	223.0	215.5	208.0	193.0	178.3	167.7	200.7
1949 <sup>P</sup> .....	186.2	194.0	196.8	185.9	210.5	234.7	224.6	219.8	210.6	199.4	185.8	179.6	202.3
1950 <sup>P</sup> .....	166.3	190.4	198.4	189.9	205.8	248.0	254.6	247.0	240.7	226.9	208.1	205.5	215.1
1951 <sup>P</sup> .....	208.9	227.1	225.6	207.7	230.5	264.7	246.4	235.9	228.9	204.5	186.7	180.0	220.6

## Iron and Steel Products

1935 .....	69.8	72.7	75.4	78.7	80.2	81.1	82.7	82.4	85.2	87.1	86.5	84.7	80.5
1936 .....	87.7	89.1	90.1	92.2	92.2	93.0	92.5	92.9	94.4	96.1	97.1	98.4	93.0
1937 .....	104.4	108.9	114.1	118.6	120.8	123.9	124.6	124.9	123.2	121.2	118.9	113.7	118.1
1938 .....	105.9	105.1	105.6	105.0	103.5	101.0	98.9	98.3	96.9	95.9	97.6	94.9	100.7
1939 .....	97.2	97.8	99.1	101.0	103.4	103.9	105.6	107.5	113.6	120.9	122.2	120.2	107.7
1940 .....	131.3	135.0	138.6	142.3	149.3	156.8	163.5	171.8	180.5	187.9	193.0	197.5	162.3
1941 .....	200.9	207.2	216.3	224.3	229.3	235.7	242.9	248.5	257.1	261.5	267.0	265.1	238.0
1942 .....	284.8	293.0	299.8	306.1	309.9	315.1	321.5	324.6	328.2	332.8	338.6	336.9	315.9
1943 .....	350.2	364.1	368.2	367.0	367.0	367.4	362.8	365.4	362.7	364.0	362.5	347.0	362.4
1944 .....	342.1	341.8	340.4	334.6	332.9	334.7	328.7	325.4	315.9	311.4	308.9	297.9	326.2
1945 .....	294.2	296.8	291.9	283.7	275.8	269.9	260.8	250.3	240.8	242.7	241.3	234.6	265.2
1946 .....	232.7	232.8	229.9	230.1	229.0	227.2	208.4	200.7	200.1	217.2	230.9	231.7	222.6
1947 .....	250.1	253.1	254.3	258.3	248.7	246.2	232.1	235.9	248.8	257.4	261.0	252.9	249.9
1948 <sup>P</sup> .....	268.8	268.8	277.4	276.8	270.9	266.8	250.5	254.9	272.8	279.4	282.0	275.5	270.4
1949 <sup>P</sup> .....	284.6	284.4	288.4	283.4	266.7	264.6	237.5	242.9	253.9	251.3	261.4	254.5	264.5
1950 <sup>P</sup> .....	247.0	250.5	256.2	255.7	252.9	261.4	246.3	254.3	277.5	285.4	292.7	278.9	263.2
1951 <sup>P</sup> .....	288.2	295.7	303.1	308.1	305.0	300.4	270.3	275.6	288.0	293.5	298.9	279.2	292.2



## Primary Iron And Steel

(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	57.3	59.4	62.2	71.1	71.0	73.3	76.4	73.3	82.8	89.2	88.3	87.4	74.3
1936 .....	88.6	89.1	88.2	94.8	87.2	84.4	80.4	80.9	85.1	89.6	93.4	96.7	88.2
1937 .....	108.8	114.7	118.4	122.9	123.1	123.9	127.1	129.6	126.2	121.2	119.4	112.0	120.6
1938 .....	107.8	104.7	109.6	115.1	111.2	106.2	96.0	88.4	86.8	83.1	91.0	88.0	99.0
1939 .....	97.2	101.2	103.2	110.6	116.9	117.0	117.6	118.8	126.5	134.7	135.9	133.8	117.8
1940 .....	154.7	155.8	159.1	161.7	167.9	173.7	175.5	179.7	186.7	193.8	191.6	197.4	174.8
1941 .....	210.1	209.1	220.8	235.4	226.7	231.3	240.2	243.6	253.6	255.2	258.0	256.7	236.7
1942 .....	313.3	320.5	325.9	336.2	335.0	332.0	333.6	326.7	327.4	321.4	328.2	322.6	326.9
1943 .....	302.7	331.4	333.3	329.5	324.7	317.6	316.7	313.8	307.9	318.8	318.2	289.4	317.0
1944 .....	267.6	273.1	282.7	282.2	282.1	282.2	275.5	283.6	280.1	288.2	291.1	277.6	280.5
1945 .....	272.4	279.9	283.8	279.6	268.1	268.8	258.8	250.2	240.6	241.5	240.3	236.9	260.1
1946 .....	219.8	221.3	219.8	220.3	220.4	216.7	149.0	120.7	117.8	177.2	213.0	217.5	192.8
1947 .....	268.8	258.3	264.1	268.1	240.3	251.3	218.0	233.0	244.5	260.1	257.8	239.3	250.3
1948 <sup>P</sup> .....	266.6	262.1	284.8	282.8	290.1	279.6	243.0	243.8	271.1	284.6	278.1	277.3	272.0
1949 <sup>P</sup> .....	278.6	282.1	307.4	299.6	276.3	276.3	219.0	236.8	248.8	243.5	273.6	256.8	266.6
1950 <sup>P</sup> .....	250.8	253.1	285.3	268.8	275.8	282.3	247.8	267.1	293.4	290.1	298.9	277.6	274.2
1951 <sup>P</sup> .....	308.6	313.1	324.9	319.6	330.4	314.9	280.3	293.6	289.3	322.9	335.9	293.9	310.6

## Pig Iron

1935 .....	71.9	66.8	72.4	75.1	73.5	74.5	81.8	88.1	90.9	73.7	108.0	114.5	82.6
1936 .....	99.6	96.8	87.7	93.8	95.5	94.5	56.8	62.6	87.1	113.7	124.7	110.5	93.6
1937 .....	107.5	111.1	103.8	114.0	126.5	130.9	129.0	120.7	127.4	131.0	136.2	132.8	122.6
1938 .....	121.2	110.1	107.2	113.6	115.9	107.7	82.9	80.1	83.6	82.0	77.3	86.9	97.4
1939 .....	93.3	74.1	65.9	80.0	93.5	88.3	96.4	106.7	109.7	138.8	147.0	152.9	103.9
1940 .....	170.0	151.1	154.0	141.3	151.4	148.7	155.7	144.3	176.2	177.6	183.8	179.2	161.1
1941 .....	166.8	163.4	165.1	178.8	183.9	187.8	165.1	171.2	191.4	221.9	223.7	240.1	188.3
1942 .....	235.8	230.4	241.5	247.8	247.7	250.8	248.8	234.9	232.8	253.5	254.7	237.5	243.0
1943 .....	168.1	221.2	231.4	232.5	223.6	220.8	218.7	238.3	220.9	212.1	212.4	198.3	216.5
1944 .....	191.5	219.9	243.6	264.0	253.9	242.5	240.6	219.5	217.8	223.4	200.1	201.7	228.2
1945 .....	225.4	239.2	247.6	233.1	224.8	237.5	217.3	202.0	201.9	203.3	201.1	195.4	219.0
1946 .....	207.6	229.1	228.2	219.7	229.9	194.0	93.2	67.2	67.3	108.3	202.0	233.3	173.3
1947 .....	256.2	241.0	237.6	248.3	231.5	238.7	227.1	241.1	253.3	236.0	260.0	239.2	242.5
1948 .....	231.9	234.2	258.6	255.8	280.2	275.2	272.4	277.4	273.3	270.2	249.8	259.5	261.5
1949 .....	264.6	276.4	292.1	279.2	292.1	290.1	253.4	260.3	251.5	239.9	234.9	248.6	265.3
1950 .....	275.2	251.5	259.3	290.6	283.1	296.4	280.4	291.7	297.8	297.4	311.0	286.4	285.1
1951 .....	290.6	309.2	329.4	315.2	316.5	318.3	303.8	293.6	317.3	324.4	333.7	318.7	314.2

## Steel Ingots

1935 .....	59.1	61.0	57.2	71.8	71.6	74.9	85.6	81.1	92.9	93.2	95.5	97.4	78.4
1936 .....	99.0	98.9	100.2	113.8	93.9	83.8	67.6	79.6	88.3	98.3	101.9	102.8	94.0
1937 .....	113.2	120.4	124.9	121.1	116.8	118.1	119.2	122.8	114.9	112.2	112.1	95.8	116.0
1938 .....	110.0	107.3	116.1	120.8	111.0	109.3	80.3	80.1	74.6	75.4	92.3	77.5	96.2
1939 .....	76.4	83.6	93.5	104.0	119.3	109.6	110.0	121.2	126.7	146.7	147.2	146.1	115.4
1940 .....	163.3	146.3	159.2	155.8	172.6	169.8	168.3	170.7	168.7	183.3	180.4	184.6	168.6
1941 .....	184.2	188.4	191.9	207.4	201.1	188.2	191.9	196.9	200.6	215.5	221.1	212.0	199.9
1942 .....	223.7	232.3	229.2	243.3	233.8	224.8	219.4	213.5	217.0	232.1	240.3	231.2	228.4
1943 .....	174.5	233.5	231.5	244.8	236.1	215.0	218.3	213.6	216.2	237.0	231.6	195.8	220.7
1944 .....	209.5	211.5	238.6	244.3	229.7	216.0	205.3	215.2	218.3	240.5	242.1	209.7	223.4
1945 .....	231.0	237.6	246.1	244.8	231.9	230.4	200.7	195.7	179.0	180.5	189.1	193.8	213.4
1946 .....	215.4	228.2	219.1	233.1	229.2	196.0	119.1	75.3	67.2	107.2	204.1	210.7	175.4
1947 .....	221.8	225.0	239.7	238.5	214.9	217.0	206.2	206.0	212.2	225.1	232.3	219.8	221.5
1948 .....	226.3	224.8	259.9	240.1	255.5	235.7	217.5	232.3	234.7	248.6	252.7	246.6	239.6
1949 .....	251.4	251.1	262.2	253.5	258.5	246.1	211.7	219.9	219.2	230.4	238.3	234.9	239.8
1950 .....	258.6	254.0	262.0	265.7	258.5	253.9	235.9	250.5	251.3	260.2	263.3	256.4	255.9
1951 .....	272.7	273.5	286.4	284.0	275.9	267.0	242.8	253.1	242.7	271.5	278.1	261.2	267.4

## Steel Castings

(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	39.2	35.1	43.7	69.8	63.9	62.0	54.2	72.7	71.0	91.3	88.1	84.6	64.6
1936 .....	84.7	77.3	78.4	84.6	70.2	75.9	67.9	57.5	66.6	56.1	54.5	87.6	71.7
1937 .....	104.5	144.0	169.9	165.9	156.1	170.2	150.5	155.7	143.3	112.9	110.2	108.5	140.9
1938 .....	111.7	108.3	120.4	149.6	149.1	146.5	128.0	106.1	71.1	56.8	66.1	65.4	106.6
1939 .....	82.2	86.0	99.1	115.4	109.5	100.9	82.5	80.0	106.0	150.5	192.9	188.9	114.5
1940 .....	171.5	174.2	173.9	155.6	141.7	143.9	125.8	132.2	128.0	147.6	141.2	124.0	146.6
1941 .....	141.9	105.4	182.3	277.4	222.4	219.4	226.1	240.0	311.9	285.3	295.4	267.2	231.2
1942 .....	295.2	307.6	313.6	357.2	343.7	349.5	345.5	319.3	327.5	358.4	353.3	352.6	335.4
1943 .....	339.0	343.5	369.7	304.3	274.7	251.4	239.4	271.1	263.5	259.7	304.8	283.1	292.0
1944 .....	284.7	314.4	318.0	252.5	264.9	273.9	213.4	247.9	261.5	271.4	284.1	303.1	274.6
1945 .....	332.1	363.1	363.4	320.8	287.2	281.0	193.8	220.6	202.2	169.1	160.7	143.6	253.1
1946 .....	179.7	186.2	188.2	190.1	175.0	149.7	113.9	132.9	118.6	136.2	132.6	132.0	152.4
1947 .....	137.7	149.0	144.3	168.9	178.7	176.0	130.2	167.1	199.1	205.0	195.8	192.1	170.2
1948 .....	198.3	224.0	244.2	227.6	218.7	220.8	149.8	192.4	211.4	215.5	235.7	205.8	212.0
1949 .....	192.4	250.7	233.4	227.6	206.8	204.8	139.7	161.3	179.4	130.8	148.4	133.9	184.1
1950 .....	133.6	152.3	145.3	150.6	156.6	150.7	114.0	137.1	181.3	182.6	220.0	215.6	161.8
1951 .....	226.0	248.2	240.5	233.5	229.1	224.7	175.6	195.8	236.0	248.4	264.3	216.0	228.2

## Transportation Equipment

1935 .....	76.0	103.3	112.2	118.9	104.2	95.8	82.1	68.2	63.5	73.1	90.6	92.3	90.0
1936 .....	92.7	100.1	110.5	132.6	116.7	103.1	82.5	64.9	62.5	65.8	83.5	107.3	93.5
1937 .....	114.8	121.5	133.5	115.2	138.7	137.2	115.3	95.7	80.4	89.3	111.3	118.8	114.3
1938 .....	114.8	114.3	110.8	125.0	119.8	108.1	83.1	75.7	73.6	74.4	106.4	106.2	101.0
1939 .....	96.5	99.5	102.9	113.5	103.8	100.5	89.6	72.3	79.0	102.8	123.2	132.3	101.3
1940 .....	138.1	145.3	152.2	155.4	159.3	148.3	148.9	158.8	174.8	188.9	202.4	209.2	165.1
1941 .....	232.6	247.6	261.1	273.9	280.4	285.6	291.0	298.9	311.7	327.7	341.5	349.3	291.8
1942 .....	371.2	390.4	397.6	410.1	420.4	435.0	444.7	454.3	468.7	482.4	498.6	505.3	439.9
1943 .....	519.7	527.1	535.8	536.7	538.5	544.8	564.4	577.6	585.9	595.8	609.5	617.9	562.8
1944 .....	697.1	702.6	710.6	711.8	724.5	738.8	722.0	704.8	679.0	667.6	645.4	620.7	693.7
1945 .....	593.7	581.2	563.8	544.4	528.8	503.9	472.5	432.2	349.0	320.0	281.5	273.4	453.7
1946 .....	249.4	236.4	239.4	245.3	239.1	218.4	212.2	193.6	190.6	197.5	221.7	214.0	221.5
1947 .....	220.5	231.2	237.2	239.2	239.3	237.2	233.2	222.9	252.3	256.5	262.0	242.2	239.5
1948 P .....	218.5	217.6	248.4	244.9	233.4	232.8	205.3	209.8	239.5	241.6	249.3	249.6	232.6
1949 P .....	218.4	233.1	251.2	262.5	253.9	259.9	247.3	223.0	255.3	253.3	227.3	241.6	243.9
1950 P .....	246.1	258.2	249.1	251.4	255.0	280.4	281.6	224.5	279.7	277.7	267.3	275.4	262.2
1951 P .....	298.7	326.8	347.0	331.8	327.4	320.4	299.1	278.2	319.9	315.9	315.3	299.2	315.0

## Motor Vehicles

1935 .....	67.4	132.4	153.0	167.9	131.5	115.0	83.7	51.0	36.1	52.5	93.9	91.6	98.0
1936 .....	88.7	101.6	125.6	182.0	145.9	114.3	69.8	34.0	32.5	37.3	78.9	135.0	95.5
1937 .....	141.6	149.7	171.9	118.0	169.6	164.6	123.8	74.2	30.5	58.6	114.4	139.4	121.3
1938 .....	124.6	119.2	108.4	139.7	122.3	99.5	63.7	41.6	41.1	40.8	121.5	125.6	95.7
1939 .....	96.5	102.5	109.3	127.5	97.9	94.6	63.7	22.5	28.4	79.6	120.3	129.9	89.4
1940 .....	127.4	132.6	139.5	144.9	146.8	114.7	110.5	135.7	155.5	176.6	187.5	192.6	147.0
1941 .....	197.4	203.8	206.1	207.8	206.9	202.9	185.2	188.6	191.6	201.5	209.4	210.3	200.9
1942 .....	226.0	231.5	217.9	221.4	231.1	241.1	244.5	247.6	254.0	255.5	256.5	259.4	240.5
1943 .....	261.0	259.7	256.8	254.6	251.9	250.8	248.1	240.8	234.9	235.9	237.0	236.3	247.3
1944 .....	232.5	229.7	226.3	219.0	217.8	217.9	210.0	212.7	209.3	209.2	211.4	208.8	217.0
1945 .....	219.0	217.0	212.1	205.8	205.0	206.1	197.4	194.5	79.8	58.5	14.0	51.8	155.1
1946 .....	71.1	70.4	100.7	145.4	159.6	140.3	133.3	94.6	100.0	117.2	143.1	143.1	115.9
1947 .....	147.9	168.8	177.6	173.9	167.8	169.3	162.7	130.0	188.4	188.2	194.3	151.4	198.8
1948 P .....	131.9	130.9	201.3	186.3	171.0	178.6	114.8	131.4	190.4	191.1	201.0	193.6	166.5
1949 P .....	108.8	144.2	185.2	215.8	204.2	224.1	196.3	142.3	222.6	213.5	150.4	190.9	183.2
1950 P .....	211.1	243.8	212.6	223.9	247.2	315.5	312.6	177.6	299.0	261.0	228.0	236.3	247.6
1951 P .....	277.9	334.2	376.4	320.6	304.9	286.5	229.7	160.7	249.7	229.8	218.4	174.2	262.7



## Non-ferrous Metal Products

(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	65.3	74.4	78.8	80.6	79.9	78.0	76.0	78.4	78.9	83.2	85.5	83.4	78.5
1936 .....	82.9	89.0	92.0	97.4	94.3	91.9	90.8	90.8	91.5	90.5	92.6	93.9	91.5
1937 .....	92.0	101.9	110.6	110.9	109.3	111.1	105.6	106.8	109.1	107.3	107.6	105.2	106.5
1938 .....	104.3	110.5	113.7	121.5	113.7	111.1	105.4	105.9	106.5	106.4	106.3	105.6	109.3
1939 .....	99.4	107.1	110.4	117.6	116.7	116.9	113.4	115.6	117.1	116.9	120.8	119.9	114.3
1940 .....	118.7	127.9	135.2	134.1	134.3	135.3	136.2	138.4	142.0	147.7	151.8	155.2	138.0
1941 .....	165.2	178.3	186.0	193.7	191.3	192.5	189.2	185.0	205.8	207.1	211.0	216.3	193.5
1942 .....	221.4	235.0	243.1	257.8	255.7	258.5	257.4	259.8	259.8	264.7	270.4	278.9	255.3
1943 .....	275.7	284.1	287.6	298.0	289.4	284.9	279.2	279.1	283.8	283.0	285.0	287.8	284.9
1944 .....	278.2	281.0	283.4	274.7	263.7	279.5	247.5	238.6	235.4	240.8	233.6	216.7	256.2
1945 .....	213.9	213.6	228.6	228.6	222.3	209.1	194.3	179.4	164.4	164.0	153.6	148.9	193.4
1946 .....	135.5	133.2	161.1	166.4	165.3	162.1	170.8	163.7	163.5	166.1	169.0	164.9	160.1
1947 .....	164.9	168.9	177.2	188.7	187.5	190.5	182.6	177.0	180.3	190.6	191.5	193.8	182.8
1948 <sup>P</sup> .....	190.9	192.4	205.0	212.9	207.8	203.6	192.6	199.5	205.6	210.3	207.7	190.4	201.6
1949 <sup>P</sup> .....	186.9	192.1	206.3	208.4	206.7	205.9	187.7	203.8	203.8	202.1	204.7	197.2	200.5
1950 <sup>P</sup> .....	195.6	199.1	203.3	212.0	213.2	216.2	202.1	207.9	225.2	225.0	231.6	222.0	212.8
1951 <sup>P</sup> .....	229.7	233.6	241.1	243.0	248.3	248.5	227.6	237.9	230.0	228.8	228.5	219.8	234.7

## Non-ferrous Metal Smelting and Refining

1935 .....	61.4	72.9	78.0	80.0	78.9	76.4	74.1	77.1	76.4	81.0	83.5	81.8	76.8
1936 .....	81.0	88.1	91.4	98.0	93.5	90.0	89.1	89.6	89.3	87.8	89.7	91.2	89.9
1937 .....	90.3	101.8	112.4	111.8	109.8	112.1	105.2	106.2	108.8	106.8	107.4	105.4	106.5
1938 .....	105.2	113.2	117.3	127.6	117.6	114.3	107.1	107.2	107.8	107.3	106.7	106.7	111.5
1939 .....	98.4	108.2	112.4	122.0	120.8	121.3	115.6	117.5	117.1	114.4	118.4	117.6	115.3
1940 .....	111.9	122.0	130.1	131.4	129.9	128.7	126.8	126.9	128.6	132.9	135.2	139.2	128.6
1941 .....	143.3	157.0	163.6	171.8	165.3	164.1	155.5	146.3	169.7	168.1	168.9	174.0	162.3
1942 .....	170.5	183.3	189.0	203.8	196.7	196.6	193.5	194.9	194.3	199.7	206.2	218.9	195.6
1943 .....	202.5	216.5	223.9	237.4	228.3	228.8	222.7	222.2	226.0	224.2	227.9	235.6	224.7
1944 .....	221.9	230.0	233.8	222.7	209.2	228.0	194.9	188.6	188.0	195.3	186.6	166.6	205.5
1945 .....	162.3	156.7	176.4	176.6	178.7	175.5	160.5	151.6	133.8	131.4	116.5	110.6	152.6
1946 .....	91.4	91.2	122.7	133.6	130.5	130.6	130.5	132.3	131.6	132.5	130.5	126.1	123.6
1947 .....	128.6	132.6	143.0	158.5	158.8	163.0	155.1	146.7	150.7	163.1	162.2	165.6	152.3
1948 <sup>P</sup> .....	163.7	160.0	177.5	186.3	179.9	178.5	179.7	173.1	178.3	181.2	177.3	158.4	174.5
1949 <sup>P</sup> .....	149.2	156.9	175.6	189.4	188.3	191.0	178.7	187.8	181.0	177.0	181.4	180.1	178.0
1950 <sup>P</sup> .....	175.7	178.9	179.5	192.5	192.5	193.4	192.9	184.1	192.8	196.2	200.4	196.8	189.6
1951 <sup>P</sup> .....	203.5	201.3	210.6	205.9	218.1	221.9	211.7	219.9	203.1	198.4	198.9	198.6	207.7

## Electrical Apparatus And Supplies

1935 .....	75.0	76.7	75.3	75.0	75.1	78.1	81.8	88.3	94.4	98.4	98.0	89.2	83.8
1936 .....	82.3	81.9	82.5	82.5	87.4	92.4	94.9	96.0	99.5	100.6	98.7	95.5	91.2
1937 .....	100.5	102.0	107.9	113.6	118.0	123.7	124.3	127.4	130.6	130.0	127.6	119.1	118.7
1938 .....	105.4	102.0	103.1	101.9	103.2	104.5	106.5	107.5	104.0	104.0	96.3	90.4	102.4
1939 .....	93.0	91.8	92.7	93.5	97.1	101.0	102.4	106.0	111.3	117.1	120.5	119.5	103.8
1940 .....	123.7	126.2	132.7	136.5	141.1	149.9	154.6	162.7	169.7	176.1	181.8	179.6	152.9
1941 .....	197.9	204.7	214.2	217.6	221.8	228.9	228.9	235.3	234.0	240.9	243.4	242.4	225.8
1942 .....	249.2	256.2	260.7	266.7	270.3	270.1	272.9	277.7	282.7	290.1	294.3	291.0	273.5
1943 .....	294.2	296.5	299.6	299.0	301.9	303.3	313.1	318.4	323.3	328.9	323.1	324.5	310.5
1944 .....	320.0	322.0	321.7	318.1	315.5	319.7	314.5	311.3	305.6	305.4	301.2	289.9	312.1
1945 .....	285.2	276.8	269.8	267.2	263.9	264.7	256.9	249.1	236.1	238.0	245.1	244.8	258.1
1946 .....	244.0	247.2	241.9	249.8	250.9	252.5	241.4	243.5	219.5	225.5	274.0	277.7	247.3
1947 .....	296.8	306.0	306.7	303.2	310.5	317.1	301.3	310.5	320.3	337.1	351.0	341.2	316.8
1948 <sup>P</sup> .....	330.9	343.2	332.2	331.6	327.1	320.5	300.8	315.4	328.1	330.9	343.6	336.3	328.5
1949 <sup>P</sup> .....	336.2	335.6	332.4	335.3	327.4	322.6	308.0	332.1	341.0	343.5	349.2	342.9	333.8
1950 <sup>P</sup> .....	308.8	325.0	329.4	343.3	351.1	377.9	359.1	356.6	399.6	412.1	427.9	420.2	367.6
1951 <sup>P</sup> .....	406.2	415.8	424.2	423.5	415.0	401.1	376.1	372.4	380.8	369.8	372.0	351.1	392.3



## Non-metallic Mineral Products

(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935.....	59.7	59.9	63.4	72.9	78.2	84.4	85.3	84.4	84.2	83.4	79.9	72.3	75.7
1936.....	72.0	71.3	77.3	84.1	93.5	98.9	101.9	103.3	104.2	102.0	99.7	91.7	91.7
1937.....	94.3	94.6	101.0	112.3	122.5	130.2	129.3	131.9	130.6	129.1	123.0	109.9	117.4
1938.....	92.2	90.7	92.7	103.4	110.9	116.7	113.3	114.4	114.0	112.9	108.3	96.8	105.5
1939.....	83.2	87.1	90.2	99.8	108.7	119.0	121.2	121.8	123.1	124.3	122.2	111.8	109.8
1940.....	109.6	106.5	113.3	122.6	134.7	149.6	152.1	157.1	158.4	156.4	153.2	147.7	138.4
1941.....	148.5	150.7	158.1	176.4	188.0	199.2	202.3	202.5	203.1	201.6	199.6	189.2	184.9
1942.....	185.7	186.9	192.6	201.5	207.1	220.3	220.4	230.5	218.7	222.0	225.6	216.8	209.8
1943.....	204.7	200.3	202.8	205.9	204.3	212.0	216.0	217.6	219.0	221.0	221.5	214.3	211.6
1944.....	211.5	209.0	209.1	213.2	210.4	213.9	209.6	204.4	199.2	200.0	196.0	187.7	205.3
1945.....	179.3	187.5	189.0	195.1	193.2	200.5	202.3	202.2	200.3	202.1	204.7	193.1	195.8
1946.....	191.0	192.5	202.6	215.1	221.0	232.4	229.6	226.4	227.6	237.5	243.3	237.4	221.4
1947.....	238.8	243.7	253.5	266.9	273.2	288.4	282.3	281.2	279.3	284.5	282.2	263.0	269.8
1948 P.....	253.8	264.2	266.8	273.6	286.4	292.9	290.7	298.5	296.4	308.0	301.1	271.6	283.7
1949 P.....	266.5	263.1	261.7	275.0	292.6	302.4	292.9	295.5	299.9	303.6	294.3	265.4	284.4
1950 P.....	261.1	262.1	269.8	294.1	313.4	340.2	341.9	334.3	342.5	355.2	343.8	316.7	314.6
1951 P.....	310.1	321.5	335.5	356.9	360.4	371.1	353.9	356.7	352.9	348.2	336.4	301.0	342.1

## Cement

1935.....	54.4	52.1	58.5	64.3	60.6	73.5	68.3	72.5	79.5	79.1	75.4	70.7	67.4
1936.....	77.2	71.0	83.0	91.3	89.3	100.3	97.0	106.9	108.5	112.2	111.3	96.6	95.4
1937.....	99.6	91.9	103.1	109.0	110.9	124.7	120.5	132.7	134.8	144.6	132.8	120.0	118.7
1938.....	90.6	83.6	90.4	103.1	100.9	113.4	113.8	116.3	122.6	131.6	120.9	109.2	108.0
1939.....	92.3	85.1	92.0	109.4	99.0	115.6	115.9	118.5	125.0	134.1	123.2	115.5	110.5
1940.....	108.6	99.9	121.5	123.4	121.0	146.9	136.4	144.8	158.9	157.8	150.5	141.1	134.2
1941.....	132.3	126.7	142.2	156.2	147.4	178.8	166.2	183.1	186.0	192.2	190.5	165.6	163.9
1942.....	134.7	129.0	144.8	159.1	155.8	175.1	169.2	186.4	189.3	195.7	194.0	168.6	166.8
1943.....	130.1	120.0	129.8	148.0	144.9	162.8	157.4	173.4	176.1	188.9	173.5	156.8	155.1
1944.....	123.0	108.9	122.7	145.9	132.0	154.0	154.5	158.0	166.6	178.7	164.2	153.9	146.9
1945.....	122.0	116.8	131.1	144.1	135.9	158.6	159.1	162.7	178.2	177.2	169.0	158.5	151.1
1946.....	166.5	159.4	179.0	196.6	185.5	224.9	209.1	222.0	243.2	241.9	230.6	216.3	206.3
1947.....	197.1	181.8	204.1	224.2	211.4	256.6	238.3	262.8	267.0	275.7	273.4	237.5	235.8
1948 P.....	225.8	253.0	257.1	241.5	255.8	281.7	278.8	313.7	288.0	325.5	292.2	236.1	270.8
1949 P.....	260.1	277.3	299.2	307.3	319.5	328.2	328.5	331.1	329.1	346.2	318.5	292.3	311.4
1950 P.....	289.6	277.8	290.0	318.7	321.4	330.8	368.8	332.5	333.9	360.6	326.6	312.5	321.9
1951 P.....	281.8	311.6	326.7	359.7	340.6	331.4	356.6	337.9	356.6	341.1	334.0	295.0	331.1

## Clay Products

1935.....	42.4	39.1	42.2	62.3	87.4	103.7	109.2	109.8	95.9	88.9	72.9	60.2	76.2
1936.....	52.0	53.7	54.7	65.7	101.5	120.7	131.0	125.7	126.2	111.8	85.3	74.4	92.0
1937.....	63.4	64.6	74.6	92.6	133.3	148.5	151.4	154.3	143.1	132.3	111.8	88.7	113.2
1938.....	62.9	59.3	64.7	90.7	134.0	149.5	144.3	135.9	132.2	117.0	103.4	87.8	106.8
1939.....	63.4	58.5	69.4	86.7	129.3	150.2	156.0	150.9	136.9	120.6	118.4	100.1	111.7
1940.....	85.6	80.0	91.5	113.0	156.4	179.4	182.5	177.6	169.4	157.2	145.8	138.9	139.5
1941.....	127.3	122.5	126.4	152.5	192.1	196.9	192.7	182.8	176.0	164.4	154.8	141.4	160.3
1942.....	134.2	125.4	124.2	136.6	148.2	157.1	154.6	154.2	144.9	141.0	135.7	121.5	139.8
1943.....	108.4	106.3	108.0	104.2	116.3	125.6	130.2	129.9	125.5	121.7	117.3	113.3	117.6
1944.....	110.7	110.7	113.1	120.3	130.9	136.2	137.9	134.2	133.1	133.6	130.0	125.6	126.4
1945.....	114.7	121.7	123.1	132.0	141.7	152.7	154.7	161.8	158.7	164.2	165.2	161.4	146.0
1946.....	153.6	157.3	167.9	181.0	199.9	207.1	220.4	218.9	218.2	215.4	205.1	188.1	194.2
1947.....	155.4	157.2	166.2	183.2	212.9	247.1	235.4	231.3	241.4	254.5	243.9	194.4	210.2
1948 P.....	162.4	181.6	188.7	189.1	228.2	267.5	262.8	260.4	267.7	267.9	264.2	228.6	230.8
1949 P.....	207.5	209.1	202.8	208.3	249.7	269.9	265.2	261.0	260.0	275.9	259.1	209.7	239.9
1950 P.....	201.9	202.6	199.8	208.9	251.2	305.2	294.1	293.6	305.4	306.3	283.5	243.5	258.0
1951 P.....	238.4	231.5	241.9	246.4	282.2	300.4	310.5	284.8	294.2	294.5	253.3	211.5	268.8

## Lime And Gypsum Products

(1935-39 = 100)

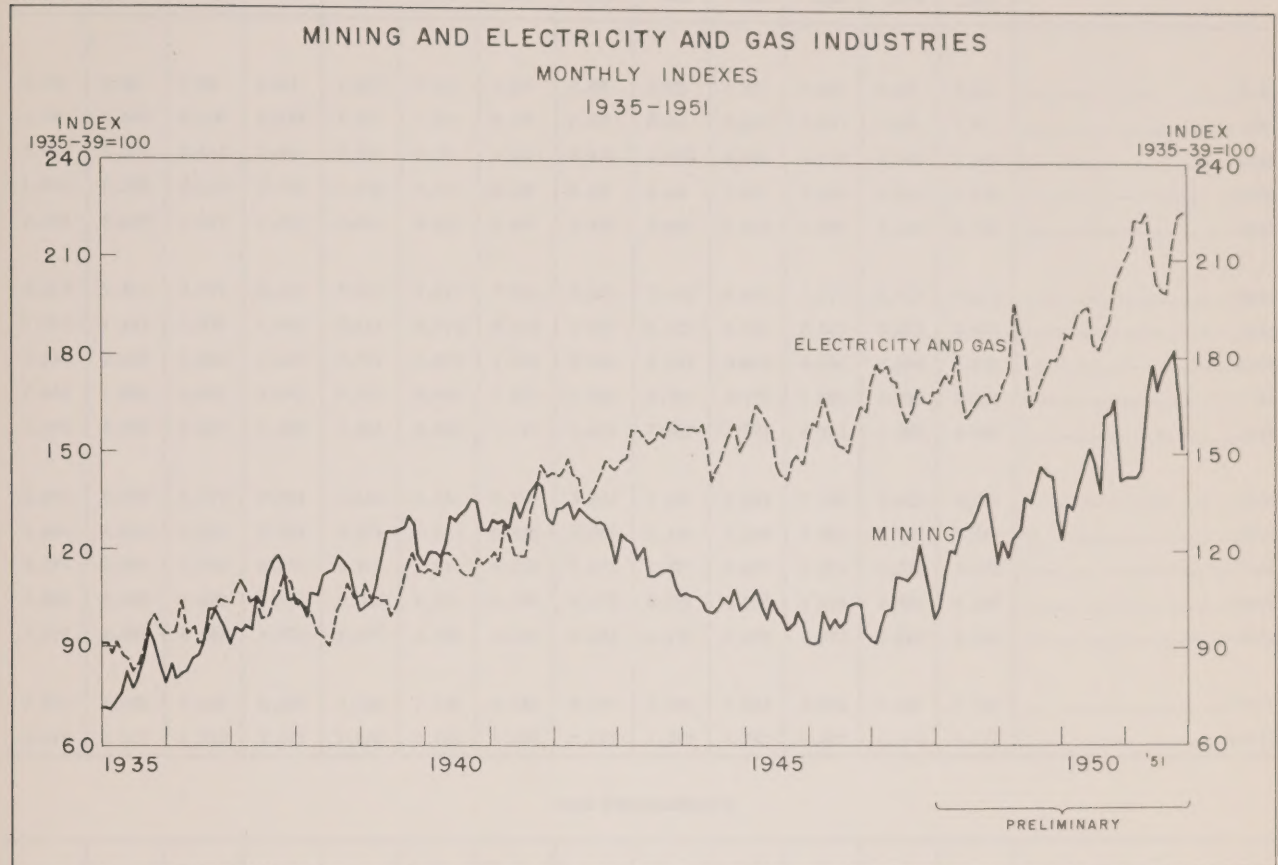
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935.....	64.7	69.9	72.7	81.7	74.2	76.4	75.7	76.6	83.0	82.2	83.8	73.5	76.2
1936.....	73.2	73.6	80.8	92.7	92.1	90.0	89.4	92.5	98.8	99.9	106.1	93.4	90.2
1937.....	96.8	105.5	110.3	117.4	117.6	115.2	112.8	115.5	111.7	115.8	116.5	92.8	110.7
1938.....	86.4	90.7	95.1	105.6	104.1	102.6	103.7	107.3	108.1	114.2	112.8	93.7	102.0
1939.....	97.7	115.8	106.6	112.0	112.6	118.9	114.9	124.1	129.8	139.5	146.6	132.5	120.9
1940.....	120.9	118.8	140.0	138.5	152.0	163.9	156.9	181.6	172.5	186.3	177.7	169.3	156.5
1941.....	165.0	170.8	165.6	187.1	189.5	205.2	193.9	192.2	190.5	195.2	190.9	181.5	185.6
1942.....	174.4	180.4	179.6	180.2	178.1	179.7	179.6	191.5	187.4	187.9	200.8	187.0	183.9
1943.....	185.5	200.7	205.5	205.7	201.2	188.9	189.6	202.5	207.0	211.5	218.8	190.5	200.6
1944.....	198.8	206.8	203.8	212.2	199.8	198.8	188.0	186.9	189.7	206.6	197.8	183.5	197.7
1945.....	175.1	183.0	190.3	195.6	189.4	193.7	191.8	185.8	198.9	208.7	239.7	205.3	196.4
1946.....	216.6	218.6	226.5	231.1	232.3	243.0	220.4	219.1	222.0	242.1	252.2	251.8	231.3
1947.....	258.2	256.5	263.7	276.3	271.1	272.1	264.6	265.5	267.5	285.8	300.8	285.6	272.3
1948P.....	264.1	302.5	310.3	318.1	318.3	276.0	288.9	312.5	321.3	349.4	336.5	309.0	308.9
1949P.....	304.3	293.5	302.8	327.7	322.9	324.7	274.8	298.5	312.0	341.0	327.8	307.3	311.4
1950P.....	297.3	316.1	326.7	340.5	314.0	349.0	294.1	329.6	356.2	388.5	390.4	345.9	337.4
1951P.....	326.8	369.8	372.0	389.7	362.0	373.7	310.1	380.0	366.5	361.3	350.1	291.1	354.4

## Lime

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935.....	68.9	76.7	80.1	89.4	80.9	83.0	79.8	78.5	88.7	90.9	91.4	80.1	82.4
1936.....	74.9	75.3	85.4	97.8	100.7	95.9	91.8	93.2	102.8	108.7	115.2	101.2	95.2
1937.....	98.5	111.1	117.0	120.0	124.6	118.6	111.1	111.1	106.1	118.4	115.8	87.2	111.6
1938.....	81.9	88.1	93.7	102.0	104.6	100.3	98.0	99.4	101.3	116.4	111.0	89.3	98.8
1939.....	90.3	88.2	88.7	103.4	103.7	111.0	105.7	110.2	118.4	140.0	147.9	136.8	112.0
1940.....	119.3	118.4	134.2	136.7	143.6	151.0	140.9	165.5	148.7	164.8	162.2	157.5	145.2
1941.....	151.9	164.9	159.1	180.8	171.3	191.7	175.5	179.1	181.0	186.7	182.4	175.3	175.0
1942.....	169.2	173.4	177.8	185.0	178.3	178.6	170.7	182.4	182.9	185.2	199.8	172.6	179.7
1943.....	166.0	184.1	189.6	186.2	181.5	164.8	170.8	189.3	197.9	199.7	212.0	171.5	184.4
1944.....	180.5	190.8	184.3	197.1	179.5	180.1	165.7	166.4	173.7	195.0	183.6	163.3	180.0
1945.....	147.2	159.4	170.6	179.1	164.7	170.4	166.4	155.9	167.1	170.4	210.7	166.6	169.0
1946.....	166.4	171.8	178.1	183.6	178.6	189.1	149.7	143.9	147.6	174.9	187.8	183.4	171.3
1947.....	183.4	180.9	189.5	209.8	199.8	204.1	192.0	199.3	194.8	209.2	221.8	203.6	199.0
1948P.....	183.4	202.6	219.5	219.9	217.0	209.5	200.0	211.2	217.8	241.3	237.9	215.3	214.6
1949P.....	207.4	198.4	203.4	221.9	217.7	217.3	202.4	188.2	205.6	220.8	211.3	196.9	207.6
1950P.....	190.6	201.4	199.4	224.4	211.2	234.5	233.9	212.7	237.2	264.7	274.4	250.1	227.9
1951P.....	230.7	241.3	253.1	263.7	260.2	253.5	250.8	256.1	256.1	270.2	256.7	230.5	251.9



CHART XLI



**Total Electricity And Gas**  
(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935 .....	91.0	91.1	88.0	91.4	87.5	86.1	82.2	84.4	89.9	97.0	99.3	96.5	90.4
1936 .....	94.1	94.0	95.7	103.8	93.9	95.0	91.6	91.3	95.1	101.9	104.6	103.6	97.1
1937 .....	103.4	106.7	110.9	107.2	103.0	104.7	98.4	98.9	102.5	105.6	111.2	109.2	105.1
1938 .....	102.3	103.0	101.2	99.9	94.4	93.1	90.5	93.9	101.1	104.3	109.7	104.9	99.9
1939 .....	105.9	109.4	104.9	104.7	103.8	103.8	99.0	102.7	109.8	114.8	119.2	112.3	107.5
1940 .....	112.8	113.6	112.1	111.3	119.4	119.4	116.9	112.3	111.8	111.8	117.1	115.8	114.5
1941 .....	116.8	119.0	116.7	127.7	124.2	118.0	118.8	118.1	131.8	138.8	145.4	142.1	126.5
1942 .....	143.9	142.9	144.0	148.0	142.5	141.9	134.2	135.1	137.7	142.3	147.8	145.7	142.2
1943 .....	144.2	147.4	148.9	156.6	156.2	155.3	152.5	153.6	156.0	154.2	159.5	158.2	153.6
1944 .....	157.7	157.8	156.8	156.5	158.8	152.9	140.1	145.1	148.9	154.9	158.9	150.1	153.2
1945 .....	153.1	155.5	164.6	162.0	159.6	156.9	145.7	143.0	141.5	147.4	149.7	146.5	152.1
1946 .....	154.0	158.9	157.7	166.5	160.7	157.0	151.5	151.6	150.1	157.9	164.3	163.4	157.8
1947 .....	171.4	177.6	174.8	176.2	172.4	171.2	164.4	159.0	163.1	170.0	166.1	165.4	169.3
1948P .....	168.7	168.8	173.7	171.8	180.5	170.6	161.0	162.8	164.5	167.6	168.1	165.4	168.6
1949P .....	166.1	170.0	174.5	196.1	187.9	182.8	164.2	166.0	170.6	175.7	179.6	179.5	176.1
1950P .....	181.6	187.2	185.1	193.7	194.1	195.3	183.5	182.4	186.2	192.8	202.6	206.3	190.9
1951P .....	210.7	214.7	222.4	222.1	224.2	213.2	202.1	199.9	199.0	215.1	222.9	224.5	214.2



**Electric Power**  
(1935-39 = 100)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1935.....	89.8	89.0	86.7	89.7	85.8	83.7	79.9	82.5	88.4	96.4	98.7	96.2	88.9
1936.....	93.9	93.1	95.9	104.0	93.6	94.2	90.8	90.7	94.7	102.4	105.0	104.5	96.9
1937.....	104.2	106.9	112.1	108.0	103.4	104.8	98.4	98.9	102.4	106.3	112.2	110.5	105.7
1938.....	103.1	103.0	102.0	99.7	94.1	92.2	89.8	93.6	101.1	105.3	111.0	106.2	100.1
1939.....	107.2	110.1	106.2	105.4	104.7	104.2	99.0	102.9	110.4	116.2	120.7	113.8	108.4
1940.....	113.7	113.9	112.8	111.6	120.3	120.0	117.7	112.5	111.7	112.0	117.5	116.3	115.0
1941.....	117.6	119.0	117.5	128.5	125.2	118.1	118.8	117.8	132.3	140.3	147.3	144.1	127.2
1942.....	145.8	143.4	145.6	149.0	143.5	142.2	134.1	135.1	137.6	143.1	148.6	146.6	142.9
1943.....	145.2	147.4	150.1	157.6	157.9	156.3	153.5	154.6	157.0	155.6	160.9	160.1	154.7
1944.....	158.2	158.1	157.5	157.1	160.7	154.1	141.1	146.8	149.9	156.1	159.4	150.4	154.1
1945.....	153.0	154.7	165.7	163.3	160.7	157.6	146.9	144.8	142.2	148.0	149.6	147.0	152.8
1946.....	153.4	157.7	158.3	167.7	161.8	157.9	153.2	153.9	151.0	158.9	165.0	164.3	158.6
1947.....	172.3	177.8	177.1	178.3	175.3	173.7	167.8	162.9	166.0	172.9	167.1	166.9	171.5
1948 P.....	168.5	167.6	174.3	172.9	182.8	172.5	164.1	165.5	166.9	169.4	168.6	165.8	169.9
1949 P.....	165.5	168.5	175.6	198.5	191.1	185.8	166.9	169.9	173.6	177.9	181.0	180.8	177.9
1950 P.....	182.2	186.9	186.9	194.3	197.6	199.0	187.6	187.5	190.2	196.2	205.7	208.7	193.6
1951 P.....	213.6	216.3	226.5	225.8	229.1	217.2	206.7	205.2	203.2	219.7	227.8	228.2	218.3

**Manufactured Gas**

1935.....	103.9	114.2	102.7	109.9	106.4	112.4	108.0	105.7	106.9	104.2	106.5	99.9	106.7
1936.....	97.8	105.7	95.0	102.2	98.4	105.4	101.5	99.1	100.8	97.2	100.8	95.0	99.9
1937.....	93.1	103.1	96.3	97.7	97.5	102.9	97.6	97.3	102.3	96.6	99.1	93.9	98.1
1938.....	94.0	103.1	92.6	102.2	97.2	103.6	98.2	97.6	101.1	92.7	95.4	90.5	97.4
1939.....	91.5	101.7	90.2	97.5	93.4	99.9	99.6	100.2	103.2	99.5	102.2	96.2	97.9
1940.....	103.0	110.0	104.8	107.4	109.0	112.2	108.1	110.0	113.5	109.1	112.7	109.8	109.1
1941.....	109.1	120.3	109.2	119.9	114.0	118.3	120.2	122.5	127.4	123.3	125.1	121.6	119.2
1942.....	123.2	137.3	126.0	137.5	132.0	139.0	135.7	135.0	139.0	133.3	138.6	135.2	134.3
1943.....	133.4	147.6	135.5	145.6	137.2	144.3	141.6	142.2	145.2	139.1	144.4	137.5	141.1
1944.....	151.7	154.4	149.0	150.1	138.4	139.8	128.6	126.8	137.5	141.4	153.0	146.7	143.1
1945.....	153.8	164.5	152.8	147.3	148.0	149.0	131.9	123.1	134.0	140.9	150.3	141.2	144.8
1946.....	160.9	171.9	151.0	153.7	148.7	147.2	133.2	126.3	140.0	147.0	156.9	153.1	149.1
1947.....	161.8	175.5	149.2	153.3	140.5	143.9	126.9	115.7	130.8	137.9	155.3	148.8	145.0
1948 P.....	170.6	181.7	166.5	159.1	155.7	149.9	126.5	133.2	138.6	147.5	162.6	160.7	154.4
1949 P.....	172.6	186.7	162.6	169.9	152.7	150.1	134.7	123.5	137.3	151.0	163.6	165.7	155.9
1950 P.....	174.4	190.0	165.5	187.5	155.9	154.4	138.8	125.8	142.1	155.7	168.8	179.3	161.5
1951 P.....	179.2	197.0	177.7	181.5	170.6	168.7	150.9	140.9	152.5	164.2	168.7	184.3	169.7



